A Strategic View of Corporate Social Responsibility: Two Perspectives from Resource Dependence and Institutional Theory

Chenwei Li, Qian Xiao, Keke Wu, University of Alabama

ABSTRACT

Corporate social responsibility (CSR) is pervasive in today’s environment. This manuscript reasons that a strategic approach would hold future for CSR research and practice. Specifically, we present a propositional framework for closely examining the relationship between organizational slack and strategic CSR participation. This relationship, however, may be influenced by the external task/institutional environment. As such, resource dependence theory (RDT) and institutional theory are combined to address the moderating affects of environmental munificence and isomorphic pressures on the relationship between organizational slack and strategic CSR participation. This manuscript indicates that strategic CSR participation should be contingent on a balance of strategic adaption and institutional response to the internal and external environment.

Keywords: Corporate social responsibility (CSR); Organizational slack; Resource dependence; Institutional theory; Isomorphic pressure; Strategy

INTRODUCTION

As practitioners and researchers have recognized the potential of CSR in improving the performance of organizations, the commitment to corporate social responsibility (CSR) has become increasingly ubiquitous in today’s environment (Lynes & Andrac hk, 2008; Maignan & Ferrell, 2004; Miles, Munilla, & Darroch, 2006). We frequently hear the business benefits of CSR-based strategies for the focal organizations (Mackey & Mackey, 2007; McWilliams & Siegel, 2000). As a precondition of CSR, the availability of unused yet potentially disposable resources, or organizational slack, is recognized by many as an important element in supporting CSR activities (Cheng et al., 1997). It may encourage organizations to invest in pro-social CSR so as to gain legitimacy from the growing number of socially and environmentally oriented stakeholders.

Yet, organizations are not necessarily engaging in CSR even with the presence of slack resources, due to the uncertainty and unpredictability of managerial choice in CSR participation (Moser, 1986). In an era of ongoing CSR revolution, we are moving away from the corporate philanthropy of money-gifting, to a much more strategic approach towards CSR investment on organizations. Specifically, rather than regarding CSR as a “moral imperative” (Donaldson et al,
1995), some researchers have examined the strategic approach to the adoption of CSR. For example, several studies stress that CSR is another component of a market strategy intended to capture value (Jones, 1995; Maignan & Ferrell, 2004; Russo & Fouts, 1997). Others even argue that CSR participation should be avoided when the returns are inconsequential, but employed when CSR investments are facilitative to organizational development (Baron, 2001). As increased CSR initiatives can also impose costs on organizations and possibly result in unproductive investments (McWilliams & Siegel, 2006), it should be no surprise that CSR is always the first activity being constrained during an economic downturn, and the last strategy being employed/resumed when economic stability returns.

Therefore, we believe that a strategic approach would hold the future for CSR research and practice. In this study, we extend the above logic and argue that CSR should be a strategic choice for an organization. Although participation in CSR activities can bring possible gains, it can also incur a sizable financial burden. For this reason, organizations should not regard CSR practice as a fad and pursue blindly. Instead, organizations should engage in CSR activities as a strategic response to the demands from the internal and external environments. As such, we contend that the initiation of CSR is contingent on organization’s evaluation regarding its own slack resources and its internal and the external environments. In other words, when social responsibility/obligation does not pose a threat to core business, organizations may reduce CSR participation for financial concerns; otherwise, organizations may strategically adopt CSR to help resolve pressures from the internal or the external environment.

By adopting two theoretical perspectives, resource dependence theory (RDT) (Pfeffer & Salancik, 1978) and institutional theory (DiMaggio & Powell, 1983; Scott, 1987), we expand our discussion to explore for ways in which organizations may utilize CSR as a strategic choice to facilitate survival and development. In particular, we ask the following questions: 1) under what conditions would organizations behave responsibly and manage CSR as a strategic choice to generate business benefits; and 2) how the external constraints such as resource dependence and isomorphic pressures may influence the practice of CSR adoption. RDT (Pfeffer & Salancik, 1978) suggests that environmental munificence, a condition under which organizations can assess critical resources in abundance, will weaken the belief that CSR “pays”. That is, munificence may largely mitigate the strategic importance of CSR relative to other vital resources. However, in reality, some organizations still choose to engage in CSR practice regardless of its less important strategic position under a munificent environment (Miles et al., 2006). Our view, based on institutional theory (DiMaggio & Powell, 1983; Scott, 1987), is that the focal organizations are confronting isomorphic pressures from rival companies, government, or other social forces. Participating in strategic CSR activities is a means for the focal organizations to attain competitive parity and legitimacy.
As such, the purpose of this paper is to further our knowledge of the relationship between organizational slack and strategic CSR participation under a munificent environment with some level of isomorphic pressures. An integrated perspective from resource dependence theory and institution theory will be employed to address our propositions. Specifically, we reason that organizations will be less likely to use slack resources on strategic CSR in the face of environmental munificence, but at times they may have to invest in more CSR-based strategies due to isomorphic pressures. The essence of this integrative perspective is that as a strategic choice, CSR participation is constrained by the availability of organizational slack and the characteristics of the external task/institutional environment.

For the benefit of CSR practice, it should be critical to understand the overall influence of slack resources and external environment on strategic CSR. On one hand, a strategic view of CSR is more acceptable to practitioners from a psychological perspective. They are more likely to embrace an idea suggesting that organizations can do well financially and at the same time do good to society. On the other hand, understanding the specific characteristics of the external environment can help organizations get a sense of the role of CSR will play, thereby preventing them from wasting slack resources that could be better spent on some other value-added projects.

**FIGURE 1**

![Diagram](image)

**LITERATURE REVIEW AND PROPOSITIONS**

**Corporate Social Responsibility (CSR)**
The conceptual discussion of CSR can be traced to organizational theorists such as Bowen (1953) and Carroll (1979), who argued that CSR should be a social obligation every organization bears as a positive contributor to our society. These theorists believe that, organizations cannot ignore society’s major challenges and should have a role in tackling the big issues. CSR participation is a norm of reciprocity for them to pay back to society when the latter “cries out for repair” (Margolis & Walsh, 2003, p268). However, the concept and origin of CSR have been subjects of ongoing academic discussion for over 20 years (McWilliams & Siegel, 2006). The discussion appears to converge on key issues concerning the multiple interpretations of CSR and a lack of consensus on the definition.

Just as many researchers have noted (Campbell, 2007; McWilliams & Siegel, 2000), there is no easy and direct way to define CSR. Because the notion of CSR varies with the context within which it operates. For instance, from an international perspective, while some CSR activities are considered to be socially responsible in one country, they are only bottom lines in the other country (Doh & Guay, 2006). Similarly, a time perspective demonstrates that activities used to be regarded as CSR before are no longer considered as CSR today (McWilliams & Siegel, 2006). In addition, stakeholder theory (Freeman, 1984; Roberts, 1992) suggests that, different stakeholders, including customers, investors, employees, and communities, may have different preferences for specific CSR. Therefore, it is important to begin our discussion by defining CSR.

Extant research on CSR has described CSR as a stakeholder obligation (Freeman, 1984; Roberts, 1992), ethics driven philanthropy (Donaldson et al, 1995), and managerial processes (Wood, 1991). We concur with Baron’s (2001) integrated-strategy perspective and define CSR as strategic actions organizations voluntarily take to further social good, and at the same time, make profits for their business. As such, we take a strategic approach in regards to CSR, and view CSR participation as a strategic response to both internal and external demands.

A few theory oriented research in this subject has examined the strategic approach on CSR. Ullmann (1985) noted that CSR participation, as a response to social demands, is obviously part of a strategy formulation process. Thus an active strategic posture could influence organization’s relations with relevant stakeholders, such as customers, investors, and employees, in a manner to achieve optimal levels of interdependence. Fombrumand and Shanley (1990) demonstrate that strategic CSR participation can generate beneficial returns by means of bolstering corporate reputation and images. In addition, Campbell (2007) suggests that strategic CSR participation can prevent organizations from potential governmental sanctions. All of these studies imply that CSR is an element of organizational strategy. Nonetheless, as a non-financial strategy, CSR finds itself hard to compete with other strategies because it may lead to great opportunities but also high risks. Inconsistent results have been found across CSR studies on its relationship with corporate financial performance (Mackey & Mackey, 2007; McWilliams &
Siegel, 2000). Although to some extent CSR participation could enhance financial performance, competitive advantage, and organization image, increased CSR initiatives could also turn into expensive investments with no immediate returns.

As such, knotty problems tied to CSR, such as how CSR can impact their business, and how CSR strategies can be developed into value-added programs, have yet to be solved. The key to the solution of these problems may lie in the balance between making profits and addressing societal demands. As such, a focus of future CSR research should be placed on exploring for ways that can lead organizations to attain this balance. Consider a specific example. When a company finds out that in certain area of the world, people still don’t assess to pure water, it will see the potential of making profits by providing running water system to that area. Although the motivation for the practice is to maximize profits by exploring new market, the practice may as well benefit the members of that area. All in all, strategic CSR should preach an approach to business that affirms the broad contribution that companies can make to human welfare, while maximizing the wealth of shareholders.

Finally, to make the definition of strategic CSR more clearly, we suggest that strategic CSR not only includes activities initiated outside the corporation at the macro- and inter-organizational or industry level within which the organization is operating, it also contains activities initiated inside the organization at the organizational level within which culture, leadership, and human resource management maneuvers (Campbell, 2007). We agree that, activities designed for environmental preservation, community involvement, product safety, and energy consumption, are considered as external-oriented, whereas, activities designed toward benefiting employees within an organization, such as affirmative action programs, equal employment opportunity policies, and working environment safety, are seen as internal-oriented (Roberts, 1992).

Organizational Slack and Strategic CSR

Organizational slack has been defined as unused resources which provide some ease for organizational operations (Cheng et al., 1997). In other words, it consists of resources available to the organization above-and-beyond those necessary to meet basic business objectives (Su et al, 2008). Singh (1986) dichotomized organizational slack as unabsorbed slack and absorbed slack. Unabsorbed slack refers to excess, uncommitted liquid resources and assets, which can be deployed to support current strategy implementation. This type of slack can be measured using selected indicators suggested by Bourgeois (1981). Absorbed slack, defined as slack absorbed in salaries, overhead expense, and various other administrative costs has been measured as the ratio of general and administrative expenses to sales (Cheng et al., 1997). In other words, unabsorbed slack refers to resources, such as financial and human capital, which can be easily redeployed to
implement certain CSR-based strategy, whereas, absorbed slack is resource internalized by organizations and cannot be directly used elsewhere.

Given the nature of CSR-based strategies as non-financial strategies, we only focus on unabsorbed organizational slack here. According to various researchers, unabsorbed slack acts a facilitator to certain strategic behaviors including CSR (Bourgeois, 1981; Ullmann, 1985). It is this cushion of unabsorbed slack that allows an organization to initiate changes through strategic CSR activities with respect to the internal and external task/institutional environment. In turn, successful implementations of these changes can help the organization adapt to its internal and external environments.

In addition, with unabsorbed slack as a resource for strategic activities, organizations are more likely to fund special projects concerning CSR in the presence of slack. Organizations can afford to adopt long-term CSR activities that may not improve firm performance immediately, because they have the excess resource to pay the price of deferred benefits. From a perspective of organization itself, when a firm faces a tough time, e.g. the current difficult economic recession, business leaders are never more focused on how to tighten spending and improve productivity. Thus, CSR-based strategies, the investments of which could be inconsequential, will be set aside for the attainment of organizational survival /development.

This line of reasoning identifies the availability of slack resources a necessary condition for the realization of an organization’s CSR-based strategies and suggests an important role slack might play in the process. The common perception is that designing a valued-added strategic CSR program is consuming both in time and energy. Therefore, from a psychological standpoint, CSR-based strategies are more acceptable, when there are excess resources (Cheng, 1988). To the extent that CSR activities involves accommodating of societal demands, organizations with more slack are more able to respond to external and internal demands from various constituents than those with less slack. Moreover, from an implementation standpoint, organizations are able to follow these strategic CSR-based programs only to the extent that unabsorbed slack are available and allocated in such ways that the various activities required by these programs can be performed. For instance, in order to increase community involvement in certain areas, the focal organization would need to acquire and allocate funds for program design and implementation as time goes on. Following this line of reasoning, we propose that:

Proposition 1: Unabsorbed slack is positively related to strategic CSR participation.

However, organizational slack is only a necessary condition and not a sufficient condition for organizations to engage in strategic CSR. It cannot alone predict whether or not organizations will choose to do so. Resource dependence (Pfeffer & Salancik, 1978) and institutional theory
(DiMaggio & Powell, 1983) indicate that when organizations exercise strategic choice of CSR, they do so within the constraints posed by the external environment (Greening & Gray, 1994). While RDT stresses task environment, institutional theory focuses on the institutional environment. Olive (1991) suggests that the differences in emphasis on the task versus institutional environment represent distinct “loci of external power” and distinct “linkage processes between the organization and environment” (p. 148).

More specially, task environment empowers those who control scarce resources and value external change and resource flows, whereas institutional environment empowers those who establish and enforce institutional rules and beliefs, and value incorporation and isomorphism (Scott, 1987). Given these differences, RDT and institutional theory may guide organizations to arrive at alternative resolutions regarding the appropriate responses to the demands of the external environment. Specifically, RDT suggests that organization should develop strategies that suit the environment that controls critical resources (Pfeffer & Salancik, 1978). Institutional theory emphasizes that organizations should adhere to the institutional environment and external rules and norms (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) when it comes to participation in CSR activities.

As such, we will apply two perspectives, one from RDT and the other from institutional theory when we address the relationship between organizational slack and CSR engagement. We argue that whether or not organizations will participate in strategic CSR is dependent on a balance of strategic adaptation and institutional response to the external environment.

**Strategic Choice of CSR from a Resource Dependence perspective: Munificence as a Moderator**

RDT (Pfeffer & Salancik, 1978) proposes that an organization’s survival rests on its ability to gain control over scarce and valued external resources. Organizations thus always engage in resource exchange relationship with one another (Thompson, 1967). The overall importance of these resources to the organization determines the level of resource dependence of the organization. Failure to control some vital resources therefore can negatively impact organizational performance. Consequently, organizations should actively seek out opportunities to develop linkages to the external environment so as to obtain critical resources as well as to decrease its dependence on the environment. In a nutshell, RDT stresses rational adaptation in the face of external dependence and is more explicit about managerial choice in the context of constraints (Boyd, 1990).

As a response to societal demands, strategic CSR serves as a strategic choice to maintain an organization’s connections to environment. It is thus reasonable to assume that CSR
participation should be impacted by external task environment. From the perspective of RDT, every organization is in the face of distinct levels of environmental demands, thus experiencing different needs for strategic CSR. Dess and Beard (1984) defined environmental munificence as the extent to which the environment can support sustained growth of organizations with abundance of critical resources. High level of environmental munificence can reduce the organization’s dependence with an abundance of external resources (Pfeffer & Salancik, 1978). In other words, in an environment characterized as munificent, organization may encounter less environmental constraints, more incentives for innovation, and extended markets. Under this kind of conditions, organizations have more ease in finding access to critical resources to protect their core businesses. In fact, this attenuating effect of environmental munificence on the relationship between organizational slack and CSR engagement may have some empirical support. Russo and Fouts (1997) found in their study that the positive relationship between CSR and firm profitability became weakened as industry growth decreased and turned mature. A mature and low growth industry resembles much of a munificent task environment, where organizations have stable resource supply and established company branding/reputation, and are less likely to be influenced by CSR participation in the short run. In other words, the marginal impact brought by CSR is greatly mitigated within a munificent environment.

As such, organizations may not feel the need or urgent to use slack resources to assume CSR, and engage in the excessive CSR activities when the environment is munificent. Moser (1986) stated that CSR participation should follow an efficiency principle ensuring each CSR practice an organization undertakes to maximize its slack resource utilization. Once CSR participation goes against the efficiency principle, it should be constrained and slack resources should instead be reserved for handling conflicts and other useful strategies in future crisis. In addition, since strategic CSR is a peripheral non-financial strategy and far from being imbedded into core business within environmental munificence, organizations may reduce CSR participation for financial concerns (i.e., a potential of slack resources waste). Therefore, when an organization operates under a munificent environment, the positive relationship between organizational slack and strategic CSR participation would be weakened due to a mitigated strategic/economic position of CSR initiatives.

The present discussion thus offers an opportunity to study how environmental munificence will demotivate organizations to participate in CSR activities through using available slack resources. Based on RDT, it is reasonable for us to expect that the level of environmental munificence may moderate the relationship between organizational slack and strategic CSR participation. As an organization becomes less dependent on its environment, the firm may become less likely to adapt by acquiring additional access or control over non-critical resources like CSR. Thus we propose:
Proposition 2: Munificence will moderate the relationship between unabsorbed slack and strategic CSR participation, such that high munificence will weaken the positive relationship between unabsorbed slack and strategic CSR participation.

However, a strategic choice regarding CSR participation may not be exercised willingly by organizations, even in the presence of environmental munificence. Although RDT suggests that organizations need to engage in little strategic CSR activities at times of munificence, invisible isomorphic pressures may force them to compete for every single piece of resource, regardless of critical or non-critical, because such resource, once obtained by their rival organizations, will create potential threats for them.

Strategic Choice of CSR from Institutional Perspective: Isomorphic Pressures as a Moderator

Institutional theory posits that institutional rules and procedures, once established as legitimate means to achieve organizational goals, have powerful influence on organizations (Oliver, 1990). Organizational development is contingent on an organization’s ability to conform to the institutional environment (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). The pressure to conform comes from institutional isomorphism ((DiMaggio & Powell, 1983), which takes three distinct forms: coercive isomorphism, normative isomorphism, and mimetic isomorphism. Each of these three types of isomorphic pressure originates from a different source (Greening & Gray, 1994). Coercive pressure occurs when formal pressures from other organizations (e.g. government) exist; mimetic pressure arises from the imitation of practices or behaviors by peer organizations in the same industry; normative pressure is present when organizations conform to normative standards established by external institutions (DiMaggio & Powell, 1983). To some extent, coercive, mimetic, or normative pressure can determine whether or not organizations will use their slack on CSR activities, and eventually institutionalized the practice.

Campbell (2007) offered a conceptual framework arguing that a variety of institutional conditions, such as state regulation, industrial self-regulation, and other social regulations/norms, tend to motivate the focal organization to engage in more strategic CSR activities. For instance, when state government passed a stricter waste disposal law, relevant organizations are forced to obey the new regulation in order to avoid any sanction. Coercive pressures like this are pervasive and always have powerful influences on ensuring organization’s CSR participation. Similarly, when organizations operate in an industry in which normative rules or procedures are established to enhance fair practices, product quality, and workplace safety, they should obey these standards to ensure their memberships. Normative pressures are even stronger for those companies operating in relatively mature industries such as automobile, food chain, and oil industry. Last
but not least, mimetic pressures exert their influences on CSR participation through building a socially responsible image/branding that would potentially help the focal organization gain competitive parity or even stand out in fierce competitions (Baum & Mezias, 1992). While we indicate the impact of mimetic pressures on CSR participation, we are not stating that an organization should just copy the same CSR practice from its competitors. Rather, it should develop some different but invaluable CSR programs whose influence should supersede these programs developed by these initiators.

In a nutshell, we argue that the relationship between organizational slack and strategic CSR participation may be strengthened by competitive or institutional isomorphic pressures (DiMaggio & Powell, 1983; Husted, 2000). When confronting such pressures, organizations are more likely to consume slack resources to engage in CSR activities as a response to social issues. Just as Clarkson (1995) pointed out, CSR activities are not employed voluntarily only for social good, but always to help fulfill social expectations and in turn gain certain legitimacy for organizations. In other words, organizational slack are more likely to be used to ensure that the actual performance of an organization is in line with social expectations about what that performance should be under high isomorphic pressures.

This paper thus focuses on isomorphic pressures, which force organizations to use organizational slack and then employ CSR-based strategies to obtain legitimacy and support from customers, investors, employees and other social forces (Oliver, 1991). Organizations comply with social values and norms just for survival and development. Thus we reason that organizations may use resources for strategic CSR activities, not because CSR activities represent a better set of actions, but because either the organizations are forced to do so by institutional regulations, or they can use their participation in CSR activities as signals that they fit in with their own institutional environment.

**Proposition 3:** Isomorphic pressures will moderate the relationship between unabsorbed slack and strategic CSR participation, such that high isomorphic pressures will strengthen the positive relationship between unabsorbed slack and strategic CSR participation.

**CONCLUSIONS AND IMPLICATIONS**

We began this paper by stating an ongoing concern on CSR in the current era. Certainly, the belief that business can play a role in our society through CSR participation is a seductive one. We extended the concept of CSR to a more precise definition based on a strategic approach. As our baseline, we demonstrate that organizational slack is a precondition of strategic CSR engagement.
In our efforts to better address the questions, concerning the conditions in which organizations would manage CSR as a strategic choice to generate organizational benefits, and the ways in which the external constraints such as resource dependence and institutional pressures may influence the practice, we closely examined the treatment of environmental munificence and isomorphic pressures as interactive factors. Thus, our overall focus concerns how the relationship between organizational slack and strategic CSR participation is impacted by the external environments. RDT and institutional theory are employed to construct our model.

We believe several useful contributions to the literature on CSR can be derived from our paper. First, this research contributes our knowledge of the strategic approach to CSR practice. This approach also represents an intriguing research line demonstrating that organizations can do good to our society as well as benefit themselves strategically and financially. Second, we sought to identify potential environmental pressures confronting organizations in our model. Specifically, we proposed that environmental munificence and isomorphic pressures may be salient in determining an organization’s strategic CSR participation. Finally, our propositions are meant to help researchers and practitioners better understand what the role of strategic CSR will play in the fact of different external environments. As such, seeking to reduce unnecessary costs while blindly pursue CSR as a fad.

This paper also has two implications for future development of our work on CSR. For researchers, the empirical testing of our propositions will require some careful thoughts regarding the construct definition and operationalization of strategic CSR, and a better understanding of what type of organizational slack, resource dependence, and institutional pressures should be measured. In addition, the present inquiry regarding the impact of munificence and isomorphic pressure seems to be pointing toward a three-way interaction effect of slack, munificence and isomorphic pressure, on CSR participation. For practitioners, we provide some ideas to assess when they should consider participating in CSR activities. Clearly, in the present time of CSR revolution, the more popular decision is to imbed CSR into the strategic management process. We propose that whether or not strategic CSR participation is a strategically beneficial decision, will rest on the external pressures each organization is facing. Superior CSR performance should act positively to our society as well as make the focal organizations more profitable. All in all, empirical verification of our propositions will benefit both the researchers and practitioners in CSR field.

REFERENCES


CEO DUALITY: HOW THE BALANCE OF POWER WITHIN A FIRM AFFECTS THE DECISION TO NAME A NEWLY APPOINTED CEO AS CHAIR

Stephen V. Horner, Arkansas State University, shorner@astate.edu
Alix Valenti, University of Houston, Clear Lake, valenti@uhcl.edu

ABSTRACT

Decades of research on CEO succession and CEO duality resulting in diverse and often inconsistent findings have not dampened scholarly interest in the topic. Instead, researchers are attempting to more effectively model the board-CEO relationship. One such modeling approach considers the power of the board in relation to CEO power. Drawing on upper echelons thinking (Hambrick and Mason, 1984) and the concept of managerial power (Finkelstein, 1992), this study analyzes the impact of board, incumbent CEO, and incoming CEO power on a key aspect of CEO succession – the appointment of the CEO to the position of board chair. Our research goal is to enhance the scholarly understanding of the dynamics of power among key participants in the corporate governance process.

INTRODUCTION

The replacement of a CEO with a new CEO is a relatively rare event in a corporation’s life (James & Soref, 1981). CEO succession is an important process of corporate control (Fama, 1980) and often represents a change in the organization. More unusual is the replacement of the CEO with a successor from outside the firm (Dalton & Kesner, 1983; Friedman & Singh, 1989; Helmich & Brown, 1972). While performance is often found to be the main predictor of appointment of an outsider as the successor (Dalton & Kesner, 1983; Friedman & Singh, 1989), researchers have suggested that other factors including size, board composition, and stock ownership will modify the relationship (Boeker & Goodstein, 1993; Bommer & Ellstrand, 1996).

CEO duality, in which the CEO serves also as the board chair, is another area of considerable research. The board chair leads the group charged with approving the CEO’s strategic plans and monitoring firm performance in the implementation of those plans (cf. Fama & Jensen, 1983). Because the CEO sets firm strategic direction, controls sizeable assets owned by others, and is likely the single most powerful individual in the firm, the CEO’s leadership of the board is a key governance issue. Organizational scholars are not alone in their interest in CEO duality, as it is also the continuing concern of corporate activists (e.g., Monks & Minow, 2001), institutional investors, and large block holders. In spite of both theoretical and practical admonitions to

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separate the CEO and board chair positions, roughly 80% of U.S. firms continue
the practice of appointing one person to both positions (Faleye, 2007; Worrell, Nemec, &
Davidson, 1997). Neither are organizational researchers in solid agreement that separation of the
two roles is always desirable, adopting instead a contingency perspective that under certain
conditions CEO duality may be a preferred arrangement and under other conditions separation
may be more effective (Faleye, 2007; Finkelstein and D’Aveni, 1994). Hence, the question of
CEO duality is practically and theoretically important, and examining its antecedents and
outcomes may lead to greater practical and scholarly understanding of the nature of the board’s
monitoring capacity and the impact of board monitoring on firm outcomes. Furthermore,
understanding antecedents of the appointment of the CEO as board chair sheds light on the
balance of power within the firm.

Although it is singularly within the board’s domain to appoint the board chair, this formal
authority does not necessarily imply the power to do so. Most corporate boards today are
composed primarily of outsiders (non-employee directors). One result of this outsider
dominance is that boards have less information about the firm and must therefore rely on insiders
(chiefly the CEO) for information regarding strategy formulation and implementation (Fama &
Jensen, 1983; Baysinger & Hoskisson, 1990). Consequently, information asymmetries between
the board and the CEO may undermine the capacity of the board to use its authority to separate
the CEO and chair roles. In such cases, boards may choose to have the CEO serve as chair even
though separation of the two roles might result in a more effective monitoring arrangement. In
other cases, the collective power of the board may provide a countervailing effect on the
asymmetries inherent in the board-CEO relationship. As noted above, theory and practice do not
absolutely prescribe separation of the chair and CEO roles in every case. Indeed, Finkelstein and
D’Aveni (1994) suggest that under certain conditions separation of the two roles may not be
warranted.

In addition, although it is a common practice for U.S. corporations to combine the CEO
and chair position, that does not necessarily occur at the time a new CEO is named. Vancil
(1987) noted that boards may wait out the early years of a CEO’s tenure before appointing the
CEO also as chair suggesting that especially when a successor CEO is appointed from the
outside, directors are not familiar with the CEO’s decision style or leanings and thus may not
want to rush the decision to name him as chair. Davidson and colleagues (Davidson, Ning,
Rakowksi & Elsaid 2008), subjecting duality-creating CEO appointments to a fine-grained
empirical examination, found that outside successors with prior CEO experience were more
likely to be appointed to both positions while heirs apparent were less likely to be appointed to
both.
Finally, there is some evidence, especially among larger corporations, that in response to governance concerns, the CEO and chair positions are intentionally being separated, with an independent outsider serving as chair (Hillier & McColgan, 2006; Valenti, 2008). Even if the two positions are combined, many boards name an outside director as its “lead” director who presides over meetings attended solely by outside members.

This research addresses the question under what circumstances will a newly appointed CEO be also named as chair. We apply the framework introduced by Cannella and Shen (2001) in their research on relay succession and suggest that our question should be examined with reference to the balance of power among the three central parties in the process: the board of directors, the incumbent CEO, and the incoming CEO. We first review the literature on CEO duality and the sources of power within the firm. We then develop testable propositions suggesting the effect of each source of power on the likelihood that a new CEO will simultaneously be named board chair. A discussion and implication for future research concludes the paper.

CEO DUALITY

The antecedents and effects of CEO duality as a corporate control mechanism have been the focus of considerable empirical investigation\(^1\). Compared to firms with unitary structures (CEO duality), firms with independent governance structures (separation of the two roles) showed consistently better accounting performance (Rechner & Dalton, 1991). Banks which have separated the positions were found to have lower costs and higher returns on assets than those with unitary leadership structures (Pi & Timme, 1993). Researchers have also considered the impact of duality on other strategic outcomes. Goyal and Park (2002) found that CEO turnover following poor firm performance was less likely in firms using a unitary structure (duality). Examining the impact of duality of earnings restatements, Davidson and colleagues (Davidson, Jiraporn, Kim, & Nemec, 2004) reported that income-increasing earnings management was more prevalent in firms following duality-creating successions than in non-duality creating successions. These studies suggest that the concerns of corporate governance activists and theorists urging separation of the two roles are well founded.

Not all empirical studies support this notion, however, and several research studies report no difference in performance outcomes between groups of firms whose CEOs also share the title of board chair and those in which the roles are split. Firms that changed corporate leadership structure showed no differences in either financial market based measures or accounting based measures of performance (Baliga, Moyer, & Rao, 1996). In an examination of firms in the U.K.,

\(^1\) See Daily and Dalton (1997) for a narrative analysis of empirical studies examining the relationship between CEO duality and firm financial performance.
Dahya (2004) found no performance improvement associated with separation of the two leadership positions either in absolute terms or in comparison to a number of peer group benchmarks. Finally, a meta-analytic review of 31 studies examining the relationship between duality and firm performance led researchers to conclude that duality showed no effect on firm financial performance (Dalton, Daily, Ellstrand, & Johnson, 1998).

These empirical studies have been grounded in the assumption, based largely in agency theory, that the roles should be split in order to preserve the independence and monitoring capabilities of the board. However, other organizational researches suggest a different tack proposing instead that one form of corporate leadership may not be the best in all circumstances. Indeed, a narrative analysis of two decades of empirical examination suggests that the focus on duality versus separation is misdirected (Daily & Dalton, 1997). Finkelstein and D’Aveni (1994) note that the choice is a trade-off between the need for boards to avoid CEO entrenchment on the one hand and to promote unity of command on the other. Brickley and colleagues imply that there are costs and benefits associated with both forms of leadership structure (Brickley, Coles, & Jarrell, 1997; Faleye, 2007). Such thinking has led some corporate executives while generally supporting the notion of CEO duality to conclude that each firm should determine which leadership structure is best based on its present and expected future circumstances (The Business Roundtable, 2002). Indeed, recent empirical study supports the notion that certain conditions may favor one or the other form of structure. In an examination of the economic determinants of CEO duality, Faleye (2007) reported that organizational complexity, CEO reputation, and CEO equity increase the probability of CEO duality and the appropriate conjunction of these determinants with CEO duality may enhance firm financial performance. These more recent studies and the rather mixed findings of others suggest, as proposed by Finkelstein and D’Aveni (1994) that a number of contingencies influence what corporate leadership structure best serves a firm’s stakeholders.

**SOURCES OF POWER WITHIN THE FIRM**

Power is the capacity of an individual to “overcome resistance in achieving a desired outcome or aim” (Lynall, Golden, and Hillman, 2003: 422; Pfeffer, 1981). In an organizational context, the capacity to control the premises and choices of decisions as well their consequences (Roy, 1997) is the basis of the power to influence others and tends to be concentrated among strategic leaders. Organizational leadership is focused on two key strategic decision-making entities – the board of directors and the CEO. In succession analysis, it becomes necessary to examine the power of both incumbent CEO and his successor and to further distinguish between internal and external successors.

**Board Power**
In certain situations boards have exclusive decision-making authority and in these cases exhibit the type of discretion normally associated with a decision-making group (Finkelstein & Hambrick, 1996). Thus, as a strategic decision-making group, the board possesses a certain degree of organizational power. However, compared to top managers, outsider directors may have limited discretion, primarily due to information asymmetries and reliance on managers for relevant information. As a result we suggest that other sources contribute to board power, specifically their expertise as directors and as managers. Such expertise may be evident in directors’ breadth of experience in dealing with environmental contingencies impacting the focal firm (Finkelstein, 1992; Finkelstein & Hambrick, 1996). Such expertise may also be based in directors’ interpersonal relationships through their experience as board members at the focal firm and other organizations. While multiple directorships have been the target of criticism by corporate reform advocates, many of whom propose limits on the number of directorships one director can hold, the scant empirical evidence on the outcomes of multiple directorships suggests that focal firm performance does not suffer when directors serve on boards of other firms (Ferris, Jagannathan, and Pritchard, 2003).

In addition to such general management or governance experience, expertise power may also be based on the relevance of a director’s expertise with respect to a particular strategic choice (Finkelstein, 1992). Strategic relevance means that the impact of a director’s expertise may lie in the director’s capacity to reduce uncertainty stemming from the firm’s dependence on task environments most problematic to the organization (Pfeffer, 1972a, 1972b, 1973; Pfeffer & Salancik, 1978). Citing Carpenter and Westphal (2001), Hillman & Dalziel (2003) noted that boards with experience in a particular situation facing the firm showed effective monitoring. The expertise power of the board may be based in directors’ general experience as top managers or directors as well as prior experience gained through familiarity with events similar to those that a focal firm’s managers face at a specific moment in time.

Finally, board prestige power may lie in the reputation of directors within the institutional environment (Scott & Meyer, 1983), among the managerial elite (Useem, 1979), from their formal authority within a social organization or institution (Giddens, 1972), or from ties to other organizations through interlocking directorates (Mizruchi, 1988; Mizruchi & Stearns, 1988; 1994). Prestige power differs from expertise power in that the latter is based on experience whereas the former is based on perceived position within social networks. Prestige power, while a general source of power for most strategic leaders, may have unique application within the context of boards of directors. Although a leader’s prestige is likely a premium with any appointment to a strategic leadership position, prestige is more heavily weighted in board appointments that in top management appointments. Indeed, a central tenet in the resource dependence perspective (Pfeffer, 1972a, 1972b, 1973, 1981; Pfeffer & Salancik, 1978) is that
prestigious individuals are recruited as directors to enhance the legitimacy of the focal firm. Hence, the prestige power of the board and its individual directors is a singularly apt application of Finkelstein’s concept of power to the domain of boards due to the importance of external interconnections directors often bring. Such formal and informal connections with and authority within organizations in the focal firm’s institutional environment may be sources of external information that, when included as inputs to the focal firm’s information processing system, lead to a reduction of uncertainty for the focal firm.

In sum, boards operate from a basis of organizational power that, while similar to managerial power, differs in the sources of its power and in the ways that power might be used to influence firm outcomes. Extension of upper echelons thinking (Hambrick & Mason, 1984) and the notion of dimensions of managerial power (Finkelstein, 1992) may inform our understanding of corporate governance in instances where boards clearly have discretion in a specific realm of decision-making. Furthermore, conceptualizing the board in terms of board power may provide value in modeling the relationship between board characteristics and a focal firm’s strategic outcomes.

**Incumbent power**

The relative power of the CEO has generally been conceptualized in terms of the unity or separation of the chair and CEO roles (Finkelstein & Hambrick, 1996). Separating the two roles places the board in a superordinate relationship to the CEO; combining the two roles reflects the confidence the board has in the CEO and its willingness to relinquish a certain amount of power (Harrison, Torres & Kukalis, 1988). Thus, CEO/Chair duality is often considered a strong indication of the CEO’s power (Daily & Johnson, 1997).

CEO tenure is also regarded as a source of power because as the term of the CEO increases, his ability to engage in persuasive behavior over directors increases (Shen, 2003). Further, the longer the CEO has held that office, the more likely that he was instrumental in the appointment of directors to the board. Researchers have pointed out that CEOs typically influence, if not dictate, the appointment of new directors (Gulati & Westphal, 1999). In many cases, directors are personally invited by the CEO to serve and only candidates approved by the CEO are elected (Kesner & Sebora, 1994). Although this is more recently within the purview of the Nominating Committee often composed exclusively of outsiders, the CEO nevertheless carries considerable informal influence over the recruitment and nomination process. Outside directors appointed by a firm's CEO are likely to have social ties to the management team (Westphal, 1999) or may be reluctant to challenge the power of the CEO because they feel indebted to the CEO for their appointments (Boeker, 1992; Daily & Dalton, 1995; Wade, O’Reilly & Chandratat, 1990). Consultants and lawyers serving on boards may be constrained in
challenging a CEO’s policies if they feel that their continued relationship may be threatened by such objections (Johnson, Daily & Ellstand, 1996). Thus, the length of time the outgoing CEO held that position should be considered in analyzing the balance of power in the succession process.

**Successor Power**

*Outside CEO successor.* An outside successor is a CEO who was not employed by the firm while the predecessor held the office (Wiersema, 1992). A potential characteristic of an outside successor CEO is prior service as CEO at another firm. Several factors unique to prior CEO experience may influence the candidate’s position relative to the hiring firm’s board. Experience in strategic leadership carries with it previous interactions with the board of directors at the CEO’s prior firm. In addition, as a CEO, such an individual is likely to have served as an outside director at other firms. Furthermore, prior service as a CEO includes experience directing the overall activities of an entire organization. These three activities – interaction with a focal firm board, interaction with boards as an outside director, and overall leadership of an organization – are major components of strategic leadership (Finkelstein, Hambrick, & Cannella, 2009). It is experience in these activities that enhances a CEO candidate’s expertise power with a board negotiating a brand new employment contract, and these are more fully addressed below.

With prior CEO experience, an individual may have significant experience dealing with a board of directors. Working with a board of directors as the key strategic leader of an organization means that the individual has likely exercised authority and responsibility for strategy formulation and implementation. In addition, he has likely made new outside board appointments (Ocasio, 1994). An individual with prior CEO experience has likely been on the other side of the table from other CEOs as an outside director at other firms. CEOs are often sought after for board appointments because of their strategic experience and exposure to the external environment and internal organizational processes from the apex of the organization.

Prior CEO experience establishes the newcomer’s ability to direct the activities of an entire organization bringing with him the ability to develop and lead a firm’s coalition (Cyert & March, 1963), experience in developing and leading strategic direction, and the enhanced prestige associated with the top corporate job. These skills may be more easily transferrable to the new position than developed by an internal successor who has not experienced the unique position of the top job. In addition, prior CEO expertise may aid the new CEO in dealing with potential internal candidates who “didn’t get the job.” While the concept of the dominant coalition (Cyert & March, 1963) recognizes that membership is not distinct at any one time and, in fact, shifts depending on the context and issue salient at a particular time, the key player in directing that coalition is the CEO, and experience in this position enhances perception of the
individual’s expertise. CEO succession is often seen as an opportunity to realign the organization with its environmental imperatives (Pfeffer & Salancik, 1978; Ocasio, 1994), and one who has done this in another organization brings a good deal of valuable expertise to the new appointment. Finally, CEOs occupy a new unique position within the corporate elite as organizational leaders (Mizruchi, 1988; Useem, 1979), and one who has already served in this capacity brings to the new appointment established prestige. All these characteristics may support an outside CEO successor in forging and aligning the diverse and often conflicting interests of the firm’s top leaders which are likely most acute at the time of a CEO succession event.

Finally, in addition to a prior CEO’s practical experience in strategic leadership, the individual arrives at the firm with significant more stature as a corporate leader than either an inside successor or an outsider with no CEO experience. A CEO candidate with enhanced stature by virtue of prior CEO experience at another firm may require additional incentive beyond offering the CEO post. One who has served as CEO at another firm may see the move to a new position as a lateral move and may require added motivation to make the move to a new firm. Financial incentives are not the only type used to entice executives from outside the firm, and bestowing additional titles may be among incentives used by boards to lure outside executives to the top post, especially where the incoming CEO also served as board chair with his previous firm. In addition, with service as a CEO elsewhere, the individual may have already progressed in her/his development as a strategic leader. Such an individual has presumably already progressed along the probationary track posited by Vancil (1987) who observed that in the process of “passing the baton,” a senior manager is given increasingly more responsibility and authority as time progresses and that this process continues beyond the appointment to CEO to include appointment as chair. Vancil reported that, on average, CEOs serve 2.3 years before becoming chair (Vancil, 1987; Faleye, 2007). The perception by the outside CEO candidate that the new position may be more of a lateral move and the potential professional development and experience the candidate brings to the firm may make the individual’s position more powerful with respect to the board making a duality-creating succession more likely.

**Internal CEO successor.** In cases where the incoming successor CEO is an internal candidate, it is often likely that he had been previously identified as the heir apparent. Internal succession as an heir apparent implies that the successor has built relationships supporting her/his ability to direct the organization with limited need for exercise of explicit authority (Vancil, 1987). These relationships are of two types: one with senior executives often spanning three or four levels deep into the organization; the other with the board of directors (Carey and Ogden, 2000). Both types of relationships resulting from prior internal incumbency allow considerable opportunities for team building and consolidation of influence over organizational players and processes (Vancil, 1987).
Service as heir apparent provides considerable opportunity to build relationships with the board at large that would enhance an individual’s standing with the board at the time of appointment as chief executive officer. Frequent exposure gives the board considerable opportunity to see the potential successor in action before the actual time for appointment arrives, and this frequent, direct exposure to the board ensures that the relationship is not mediated by the CEO (Carey and Ogden, 2000). As a result, the board is likely familiar with the individual potentially requiring less probationary time as CEO and “chair-in-waiting,” a practice observed frequently with new CEOs (Vancil, 1987).

In addition to the board’s familiarity with the potential internal successor and the candidate’s familiarity with the board, the time as heir apparent may also involve service on other boards. Corporate governance experts strongly urge that internal CEO candidates serve on other boards (Carey & Ogden, 2000). This allows the candidate to develop some expertise in the functions of governance by providing the kind of support and monitoring expected of outside directors. Furthermore, service on other boards by a potential CEO candidate enhances the individual’s reputation and standing among corporate leaders. The experiences of working with the focal firm’s board and serving as outside director on other firms’ boards enhances an individual’s expertise as a business leader as well as one’s reputation among other business leaders.

Service as heir apparent frequently includes a series of meaningful assignments of strategic importance (Carey & Ogden, 2000). Such assignments afford the potential candidate the opportunity to create and maintain internal organizational relationships through distribution and control of organizational resources such as financial resources and appointments of subordinates to other meaningful assignments allowing the potential successor time to create “networks of influence” (Ocasio, 1994: 287) within the organization. Development of organizational authority and responsibility results in a higher level of internal influence over organizational players and processes. In addition, as “number two” the heir apparent essentially serves as an agent for the CEO who, in turn, is an agent of the owners and is empowered to act in their behalf.

**Board Power and CEO Duality**

The board’s impact on strategic outcomes stems primarily from its capacity as the firm’s secondary control mechanism (Johnson, Hoskisson, and Hitt, 1993; Walsh & Kosnik, 1993). Although the board is not directly responsible for the firm’s strategy, it impacts strategy through its capacity to ratify and monitor management’s strategic plans (Fama & Jensen, 1983).
Although board power is not directly manifest in the strategic direction of the firm, it becomes apparent through critical choices the board is able to make in the strategic management process. These include appointing the CEO (and retaining through contract extension), setting CEO compensation, and choosing the board chair. However, the likelihood of dual appointment as CEO and board chair may be impacted by power of the board of directors, which is evidenced by both board expertise and board prestige.

The number of other multiple directorships represented on the board may enhance the board’s expertise. Although theory and corporate governance critics suggest that multiple directorships represented on boards lead to complacent, entrenched boards, resulting in reduced board capacity to monitor, Ferris and colleagues (Ferris, Jagannathan, and Pritchard, 2003) found that multiple directorships were not significantly associated with negative performance. Boards with directors serving on multiple boards were not found to be “too busy to mind their own business” (Ferris et al., 2003). These findings are somewhat at odds with the prevailing wisdom that multiple directorships reduce board effectiveness and monitoring capacity. Rather they suggest that multiple directorships enhance board expertise.

Greater expertise from multiple directorships may be attributed to a number of phenomena associated with interlocking directorates. For example, interlocking directorates may result in greater quantity and quality of information. Such information is not necessarily about specific opportunities or threats but rather about general business conditions (Haunschild, 1993; Useem, 1984). Well-connected boards are likely to have sound information systems based on external awareness rooted in knowledge of the firm’s task environment and of general business conditions (Useem, 1984) and on internal awareness based on familiarity with the firm’s interface with its task environment, with the key organizational boundary spanners with respect to that interface, and with key organizational decision makers. Multiple directorships may enhance the board’s capacity to manage the information links between the firm and other organizations considered vital to managing the firm’s external contingencies (Pfeffer & Salancik, 1978).

The enhancement of the quantity and quality of information available to the focal firm and the ability to manage that information enhance the strategic relevance of the board’s expertise within the context of the focal firm’s strategy. As an information processing system, the board’s information input and its capacity to manage and process that input enhances the board’s capacity to interpret that information in ways that are meaningful to specific strategic alternatives available to the firm’s management. The board’s broad exposure to a variety of external conditions and the board’s experience at addressing these conditions (and seeing them addressed by other firms’ managers on whose boards they serve), support the learning necessary to convert these general observations into choice-specific information inputs to a decision or
strategic process at hand thereby making their expertise relevant to a specific strategic context. This seems to be the core of the idea of strategic relevance - the capacity to infer information about a specific situation from a variety of generalized experiences and bring this information to bear on specific decision. Hence, the board’s expertise is enhanced by strategic relevance of directors’ individual experiences with the general context of business conditions and through the variety of their exposure and involvement in concurrent conditions. We posit that a board characterized by a high number of multiple directorships will have more expertise.

Increasing the quality and quantity of information that directors have about the firm’s internal conditions leads to less reliance on the information that would normally be provided by inside directors (Baysinger & Hoskisson, 1990; Fama & Jensen, 1983). The resulting reduction in reliance on insiders produces more independence on the part of the board, a characteristic generally regarded by corporate governance experts as leading to enhanced monitoring mechanisms (e.g., separation of the chair and CEO roles, board meetings without the presence of insiders, appointment of a lead outside director). The greater the power of the board, the greater this independence thereby increasing the likelihood of effective monitoring mechanisms such as dual leadership.

The prestige power of the board is also enhanced through multiple directorships. Multiple directorships are often considered a manifestation of an individual’s social embeddedness in the business elite (Mizruchi, 1988; Mizruchi & Stearns, 1988; 1994; Useem, 1979; Granovetter, 1985). Greater embeddedness will also result in a lower incidence of CEO duality immediately upon appointment as new CEO.

Despite the expertise and prestige power gained through multiple directorships, power will be diminished if board size is too large. A key element of board structure addressed by organizational researchers is board size (Finkelstein & Hambrick, 1996). Board size has demonstrated some effects on firm financial performance (Dalton et al., 1998; Hermalin & Weisbach, 2001). A narrative review of the economic literature (Hermalin & Weisbach, 2001) suggests a negative relationship between board size and performance. A larger board may be too unwieldy to adequately control and serve the focal firm’s management leading to the possibility of lower performance outcomes. A meta-analysis of the board size-firm performance relationship indicated a systematic, non-zero, positive relationship between the size of the board and firm performance (Dalton, Dailey, Johnson & Ellstrand, 1999). However, while larger boards can encompass a wide range of expertise, there is an ideally efficient size which if exceeded will hurt performance (Dalton, et al. 1999). Hence,

Proposition 1: Multiple directorships represented on the board will reduce the likelihood of CEO duality at the focal firm; board size will moderate this relationship.
Incumbent Power and CEO Duality

Research on executive turnover indicates that incumbent CEOs are often reluctant to give up their position even if firm performance has been poor (Boeker, 1992; Fredrickson, Hambrick & Baumrin, 1988). Cannella and Shen (2001) found some support for their hypothesis that incumbent CEOs would force an heir apparent out in order to keep their position when the firm was performing well. Incumbents who do resign have the opportunity to influence the selection of the replacement CEO either by grooming an heir apparent within the company (Vancil, 1987) or selecting an outsider who is demographically similar to themselves (Zajac & Westphal, 1996).

When incumbent CEOs are also the board chair, entrenchment is more likely as their role as the leader of the board can influence other board members to retain them. As the key organizational contact between the board and the organization, the CEO occupies the pivotal point of interaction with the board. Members of the board thus interact with the CEO not only in their oversight role, but also as a strategic partner in planning and decision-making. The CEO/Chair, therefore, is in a position to persuade the other members of the board to retain his services on the board even after resignation as CEO. This is especially evident in cases where the incoming CEO is hired from the outside. Because the board is not familiar with the new CEO and would prefer some modicum of continuity, it is reasonable for them to keep the incumbent as board chair for a period of time until they are satisfied that the new CEO can assume both roles.

Proposition 2: When the outgoing CEO is also the chair, the lower the likelihood of CEO duality at the focal firm.

CEO power is likely to increase over his incumbency as CEO and a member of the board, even if not the chair. Appointments to the board during his tenure strengthen the CEOs influence over corporate decisions and often insulate him or her from the pressures of economic performance (Ocasio, 1994). During their long service, CEOs have the opportunity to shape their boards and develop a relationship with outside board members that enhance their staying power even after they step down as CEO. Thus Quigley and Hambrick (2008) found that tenure was positively related to the likelihood that a predecessor CEO will be retained as chair. Similarly, Brickley, Linck and Coles (1999) found that nearly 20 percent of former CEOs continued as the chairman of a board for as long as two years after leaving office. This is often the case when the outgoing CEO holds a significant percentage of the shares or may be a founder (Quigley & Hambrick, 2008). That being the case we propose the following:

Proposition 3: The longer the tenure of the outgoing CEO, the lower the likelihood of CEO duality at the focal firm.
Successor CEO Power and CEO Duality

Former CEOs moving into a new organization will have a great deal of influence over the strategic decisions of the new firm (Boeker, 1997). For example, Davidson and colleagues (Davidson, et al., 2008) found that prior CEO experience is a strong predictor of duality-creating CEO appointments. This will be especially true for CEOs that are recruited from large firms (Pfeffer, 1981). When CEOs are selected from outside the company, it is often because the board has not identified a suitable candidate from within the company (Finkelstein & Hambrick, 1996). In such situations, it is critical that the board identify a nominee who has a strong track record of leading a company as its top officer. That individual is also likely to serve as the chairman of his current firm and will demand that the hiring firm offer the same privilege. The focal firm’s board will need to propose a package of benefits that will entice the candidate to leave his or her current job, which very likely will include being named the chair.

Proposition 4: The likelihood of CEO duality at the focal firm is higher when the incoming CEO is an outsider and was recruited as the CEO of another firm.

When the successor CEO is recruited internally, the board’s relationship with potential successor is nearly as critical as its relationship with the current CEO, and an heir apparent will likely have considerable familiarity with the focal board. As a senior manager in the firm, the individual will have had occasion for frequent formal and informal interactions with the board affording directors the opportunity to see both the professional abilities and personal qualities of the individual. During the course of development, the candidate will have undoubtedly made presentations to the board on matters of strategic importance and been given meaningful assignments with some accountability to the board for their outcomes.

Although as a senior manager, the individual likely has frequent contacts with other business leaders, the opportunity to serve in a formal governance role as an outside director advances the process of building the individual’s own prestige power as a member of the corporate elite. Service on other boards is regarded as a critical stage in the process of developing potential CEOs and may be valuable experience for a future CEO who suddenly finds the governance roles now reversed. Through interaction with the board and service on other boards, the candidate develops expertise power by developing the ability to interact with a key governance player (the board) and by developing the capacity for strategic direction through the increasingly strategic nature of the various assignments.

The combination of board interactions and participation in strategic decision-making enhances the governance expertise of the candidate. Finally, the candidate develops prestige
power through the reputation developed with the board of the focal firm, the boards of other firms, and the heightened prestige of being regarded as a corporate leader (Finkelstein, 1992). The clout that an heir apparent is able to develop by virtue of such service may provide a formidable bargaining position when negotiating a new employment contract as CEO. Further, the board’s commitment to the heir apparent is likely to result in its willingness to grant additional power as the CEO, namely the role of chairman (Cannella & Shen, 2001).

Proposition 5: The likelihood of CEO duality at the focal firm is higher when the incoming CEO is an insider and the heir apparent.

THE BALANCE OF POWER IN THE SUCCESSION PROCESS

A key aspect of the distribution of power between the board, the incumbent CEO and the incoming CEO is the appointment of the new CEO as the board chair. This study posits that each of these sources of power is critical in the process of naming a newly appointed CEO as chair. The question then turns on which person is the most pivotal in making the decision, and we adopt a contingency approach with firm performance as the relative factor.

Several studies have found that poor organizational performance is associated with the selection of a CEO from outside the firm (Boeker & Goodstein, 1993; Cannella & Lubatkin, 1993; Schwartz & Menon, 1985). When an outsider is appointed following the forced turnover of the previous CEO, a strong message is sent demonstrating the need to break from the past (Friedman & Saul, 1991). Outsiders are viewed as being able to bring a new perspective and are better equipped to initiate the needed change to improve performance (Kesner & Dalton, 1994; Wiersema, 1992). Studies by several researchers found that appointment of an outsider replacement CEO leads to a positive stock market response (Cannella & Shen, 2003), especially following periods of poor performance (Denis & Denis, 1995; Huson, Parrino & Starks, 2001). When a firm is facing bankruptcy, the appointment of an outsider sends a message to the market that business will no longer be conducted as usual (Davisdon, Worrell & Dutia, 1993).

Finkelstein and D’Aveni (1994) argue that duality is preferable after periods of poor performance to convey a sense of unity of command and strong leadership. In times of financial distress, combining the roles may be preferable to enable the CEO to make critical decisions affecting the future of the organization (Harris and Helfat, 1998). Boyd’s (1995) research supports the conjecture that in times of uncertainty, characterized by low munificence or high complexity environments, the combined structure will be more effective. Boyd (1995) suggested that a resource-scarce environment, such as is likely to exist following a decline in performance by the firm, may lead to duality so that the power in the firm can be consolidated for a faster, more unified response to the poor conditions.
Figure 1

Board Power
Expertise Power
Prestige Power

Board size

Incumbent CEO Power
CEO/Chair Duality
Tenure

Firm performance

Incoming CEO Power – Heir Apparent

Incoming CEO Power – Outside Replacement

CEO duality
We suggest that CEO duality of a newly appointed CEO following periods of poor performance will be driven by the outsider recruited by the board. Since it is likely that the incumbent was forced out because of performance (Helfat & Bailey, 2005), his power, whether based on chair position or tenure, will be irrelevant. Further, the board will be most concerned with improving performance and will want to select the best candidate for the job, even if it means offering the chair position. Thus, the relative power of the incoming CEO based on his former position as the CEO will be the best predictor of CEO duality following poor performance.

When a CEO resigns during periods of relatively good performance, the situation is likely to be much different. In such cases, the CEO decides to step down whether due to retirement or other opportunities. The incumbent generally has established good relations with the other board members. Further, the incoming CEO, even if an heir apparent, is not as well known to the board. Consequently, the board may prefer that the incumbent remain on the board for a year or two while the new CEO becomes acclimated to his new position. Accordingly, the relative power of the incumbent CEO as well as the power of the board, together, will predict whether the incoming CEO will also be named chair, with board size as a moderating variable. An illustration of our model is shown in Figure 1

CONCLUSION

Agency costs associated with one person occupying both the CEO role and that of board chair have prompted governance scholars and corporate reform activists to call for separation of the two positions. In spite of the strong arguments against the practice, CEO duality is the dominant configuration among U.S. corporations, leading some researchers and practitioners to suggest that rather than using a “one size fits all approach,” the best configuration is contingent on a number of factors. This study seeks to enhance understanding of antecedents of CEO duality by examining the power dynamics present at the time of CEO succession. Prior research into this question (Cannella & Shen, 2001; Quigley & Hambrick, 2008) suggests that these power dynamics involve the three major parties to the succession event – the board, the incumbent CEO, and the successor CEO. The balance of power among the members of this triumvirate may be a strong predictor of the likelihood that appointment of a new CEO will include appointment also as board chair.

The underlying components of power of these three parties lie in their inherent characteristics. The power of the board lies in the collective expertise and prestige of the directors based on their service as directors on other boards. The power of incumbent CEOs depends on whether they have served also as board chair and on their tenure as CEO at the focal firms. Outside successors may have considerable power relative to the hiring board if they come to the focal firm with prior CEO experience that has afforded the opportunity to 1) interact with another board as the key strategic manager of the firm, 2) to serve as an outside director on other firms’ boards and 3) direct an entire organization as the key strategic manager. Finally, internal successors have an existing power base within the hiring firm based on their collaborative and authority relationships with other current employees of the firm, their relationship with the current board, and their experience in serving as
outside directors at other firms. The relative strength in the power bases of these three major parties to a CEO succession event is a key factor in predicting CEO duality at the time of CEO succession.

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THE INFLUENCE OF EXECUTIVE OPTIMISM ON STRATEGIC PROCESS

James Langabeer, University of Texas at Houston, james.r.langabeer@uth.tmc.edu
Jami L. Dellifraine, University of Texas at Houston
Jeffrey R. Helton, University of Texas at Houston

ABSTRACT

Although management researchers have long recognized that cognitive and behavioral constructs can influence strategic process, there have been surprisingly few empirical studies exploring their actual influence. More specifically, there have been no reported findings examining how an executive’s general tendency to expect positive outcomes (i.e. optimism) shapes their strategic process. In this study, we use survey research to examine if optimism serves as a cognitive bias that short-circuits the strategic process, or more specifically results in a greater use of incrementalism versus a comprehensive rational process. In a large cross-sectional sample of chief executive officers, we find that executive optimism is associated with less rational strategic processes.

KEYWORDS: Optimism, strategic process, rationality

Rationality and Incrementalism

Early theories of rationality have primarily taken a normative approach to strategic process, promoting more exhaustive search and selection processes in strategic decisions by a rational actor. Subsequently, later research began associating levels of comprehensiveness and structure in strategic processes with firm performance and the environment, such as uncertainty, complexity, munificence, dynamism, maturity (Rajagopalan, 1993; Prescott, 1986). A comprehensively rational, or synoptic, decision-making orientation has found that greater rationality is generally favorable in stable environments (Fredrickson and Mitchell, 1984) and in environments that experience lower levels of dynamism (Goll and Rasheed, 1997), while less rational (or more political and incremental) approaches might be expected in environments that are more turbulent, high-velocity, and unstable (Eisenhardt and Bourgeois, 1988).

Strategic process research has focused significantly on the extent to which decision processes exhibit comprehensiveness or incrementalism (Mueller et al, 2007; Miller and Friesen, 1983). Comprehensiveness refers to a thorough, exhaustive search for alternatives and a systematic construction of goals (Huff and Reger, 1987), while an incremental process is one where goals are less formally derived, and decision alternatives are often not systematically collected or evaluated (Quinn, 1980). Incrementalism is typically associated with heuristics, or general guidelines to produce rapid, more judgmental or intuitive decisions that are not analytically derived.
From an empirical perspective one of the missing contextual variables for understanding strategic process and decision making is that of cognitive process and disposition. While previous research proposes that managers rarely act consistently rational because of cognitive capacity (e.g., Cyert and March, 1963), it has not been adequately studied. Findings from integrating behavioral research with strategy research has shown that cognitive biases impact firm performance (e.g., Clapham and Schwenk, 1991; Hmieleski and Baron, 2009), and that cognitive simplification during decision process as an impediment to decision quality (Schwenk, 1984). Most of the research however has focused on the manager’s process of reducing or eliminating decision steps through simplification or heuristics. Inherent in this simplification process, one might expect to find that cognitive processes, personality, and disposition all play a role in influencing both the process and the quality of decision making.

**Optimism**

An individual’s level of optimism (defined as the disposition to expect more good things to happen than bad), could partially explain why managers would have less thorough or comprehensive decision making processes. Although a few researchers have attempted to describe how a social cognitive theoretical framework could explain how optimism and other personality characteristics influence an individual’s perception of the environment (Woods and Bandura, 1989), no researchers have focused empirically on this link between optimism and decision making.

Behavioral researchers have intensely studied personality traits, and dispositional optimism is one trait that receives considerable attention. Optimistic (as opposed to pessimistic) individuals tend to be more creative in problem solving, and be more proactive then reactive. Optimists are more likely to envision greater opportunities (Levinthal & March, 1993), and are more eager to face challenges (Seligman, 1990).

However, other researchers have focused on how these personality characteristics can become a cognitive bias that could negatively impact decision making processes. A cognitive bias is an error in judgment based on cognitive thought processes (Shefrin, 2007). Schwenk (1984) describes several biases, namely the use of simplification processes and heuristics and their impact on decision quality. Other biases that have been researched extensively include attribution bias (Salancik, and Meindl, 1984; Huff and Schwenk, 1990), where executives attribute good organizational outcomes to their own personal behaviors and performance, while attributing blame or cause for bad performance on the environment or others in the organization.

Optimism can create excessive confidence, which could bias or skew decision makers into thinking they have the complete picture of the problem or decision, when in fact they do not. Dispositional optimism can be more clearly defined as a “generalized expectancy that good as opposed to bad outcomes will generally occur across important life domains” (Scheier et al, 1994). If optimism serves as a bias, this limited view would be expected to have a negative relationship with decision quality and ultimately firm performance. Optimism and its potential...
impact on a variety of situations has been studied widely as a personality trait, but in managerial studies the trait has been studied infrequently (Peterson et al, 1998). Shefrin (2007) describes how excessive optimism from executives about their ability, knowledge, and environment could lead to potentially disastrous performance, although most of the findings were more anecdotal than empirical.

**Hypothesis**

Our general framework suggests that optimism can serve to influence the decision making process. We propose that high levels of executive optimism will likely result in decision makers relying less on rational analyses and therefore using a more incremental process. Therefore, we propose the following hypothesis:

Hypothesis 1. There will be a positive relationship between the level of executive optimism and the prevalence of incremental strategic decision processes.

**METHODS**

We tested our hypothesis using survey research of the for-profit side of the U.S. hospital industry. Isolating one industry allowed us to control for industry effects that might confound findings. The total population of for-profit hospitals was 873 in 2008, which we identified through the American Hospital Association database. We received 168 completed responses, for an overall response rate of 21%. Responding and non-responding firms were compared for size, and we found no significant differences (p<.01) that might limit generalizability of the findings.

The survey instrument was developed to capture aspects of the strategic process and executive optimism. The questionnaire was electronically distributed to the chief executive officer of each organization, and we instructed each executive to respond to the questions on behalf of their perspective on the organization and the strategic decision making process. We defined strategic decisions as those that have significant long-term implications for an organization, require major financial commitments, and could lead to long-term performance change (Miller, 1987).

The questionnaire had 10 primary questions, plus demographics. For decision making, we adopted a 5-point Likert scale where responses ranged along a continuum from incremental to comprehensively rational, similar to that used by Goll and Rasheed (1997). We used four questions, and lower scores indicate higher rationality while higher scores represented a more incremental approach. The four questions showed high internal reliability, with a Cronbach’s alpha=.81.

We targeted the chief executive of each organization to obtain their level of dispositional optimism, which was measured using the questions from an instrument proven valid in multiple studies (i.e., the Life Orientation Test, or LOT-R) developed by Scheier et al (1994). This instrument uses statements such as “Overall, I expect more good things to happen to me than
bad”, and “I'm always optimistic about my future”. The questions were measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree", where higher scores indicate higher optimism levels. Internal consistency was high with these questions (Cronbach’s alpha = .77).

We used both univariate correlations and analyses of variance to examine the relationships between the two primary variables (optimism, heuristic-rational process).

## Results

The level of executive optimism ranged from 1 to 5 with a mean of 3.1, which suggests that the sample overall was slightly more optimistic than pessimistic. The overall level of decision process style was slightly skewed towards greater rationality. Table 1 presents the descriptive statistics and correlations for the variables.

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strategic Process</td>
<td>2.88</td>
<td>1.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Optimism</td>
<td>3.10</td>
<td>1.18</td>
<td>.170 *</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Size</td>
<td>2.45</td>
<td>1.0</td>
<td>.043</td>
<td>.018</td>
</tr>
</tbody>
</table>

*p<=.05; ** p<.01

Our hypothesis proposed that optimism is related to the level of incremental (or less rational) strategic process. Univariate correlations confirm this (r=.17, p<.05) relationship. To further test this we divided the sample into three groups (highly rational, highly incremental, and a middle group representing the median). We used ANOVA to test the difference in levels of optimism between the three groups and we found that optimism was significantly different (F=3.29, p<.05). Those executives reporting more analytical, rational processes overall had lower average optimism levels (2.97 versus 3.39). Conversely, executives reporting greater use of incremental processes had higher optimism levels. Table 2 presents the analyses of variance.

<table>
<thead>
<tr>
<th>Strategic Process</th>
<th>n</th>
<th>Mean Optimism Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Incremental</td>
<td>61</td>
<td>3.39</td>
</tr>
<tr>
<td>Moderate</td>
<td>38</td>
<td>2.84</td>
</tr>
<tr>
<td>Highly Rational</td>
<td>69</td>
<td>2.97</td>
</tr>
</tbody>
</table>

F=3.29, p<.05
Discussion and Conclusions

The results of our analyses suggest that optimism appears to influence the strategic process within organizations. Specifically, our analyses find that optimism is positively associated with an incremental strategic process, as opposed to a comprehensive, rational one. Apparently, executives that are overly optimistic tend to rely on different strategic process—one that emphasizes judgment and heuristics over rationality and analyses.

This research contributes to existing theory because it is the first to empirically integrate dispositional characteristics of executives into strategic process research. The positive association between optimism and incrementalism is interesting and should be the focus of further research integrating behavior, cognition, and strategy. Specifically, we are attempting to further this research by incorporating multiple additional variables, such as environment, competition, performance, and other moderating variables as well as extending the study across several industries.

There are several limitations to this study. We relied solely on the input of optimism and strategic process from the perspective of the chief executive officer. Future research could integrate the top management team. In addition, the survey was cross-sectional. Future research should provide for data collection over multiple periods.

In conclusion, this study is the first to operationalize optimism and attempt to understand its influence on strategic process. The results point to a need for further research in the area of cognitive bias and strategic processes. Other aspects of cognition, behavior, and personality could similarly help to provide a richer understanding of the relationship between the strategic process and outcomes.

References


GLOBAL CONCEPTUALIZATIONS OF COMPETITIVE STRATEGY: 
EXPLORING CHINA, TURKEY, AND THE UNITED STATES

John A. Parnell, University of North Carolina at Pembroke, john.parnell@uncp.edu 
Mehmet Ali Koseoglu, Menderes EDAS, trmaliktr@yahoo.com 
Zhang Long, China University of Geosciences (Beijing) Haidian District, Beijing, Visiting 
Scholar at Texas A&M University at Commerce 
zhanglongdragon@hotmail.com 
Wu Yuanyuan, China University of Geosciences (Beijing) Haidian District, Beijing, 
wuyy1975@hotmail.com

ABSTRACT

Most competitive strategy studies have analyzed samples in the developed world, namely the 
United States and parts of Europe. Cross-cultural work—particularly in emerging economies—
has been limited. This paper reexamines the nature of competitive strategy in China, Turkey and 
the United States. Like their American counterparts, Turkish managers reported a greater 
emphasis in their organizations on innovation than on cost leadership approaches. However, the 
Chinese respondents did not follow an innovation-cost distinction when evaluating the strategies 
of their organizations.

INTRODUCTION

There exists a large volume of empirical work at the competitive strategy level of analysis. Most of these studies consider samples in the United States, the United Kingdom, or 
other parts of the developed world. Considerably fewer studies have examined emerging 
economies. This exploratory paper seeks to fill that gap by assessing competitive strategy in 
China, Turkey and the United States.

Nations classified as transition economies currently offer the greatest business 
opportunities in the world. China, the largest such society, has enjoyed a tremendous amount of 
development and success in recent years. China’s entrance into the World Trade Organization, 
declining import tariffs, and increasing consumer incomes suggest a bright future for the nation.
At present, China remains a mix of the traditional lifestyle based in socialism and its own form 
of a neo-Western economic development. However, a great deal of uncertainty remains among 
Western business leaders concerning the Chinese marketplace and Chinese management 

Turkey is also an intriguing nation to evaluate for several reasons. Since the early 1980s, 
government policies have focused on developing a free market economy and have encouraged an 
outward-oriented export-led development strategy. Significant progress has been made in the 
liberalization of trade and investment policies and the pursuit of macroeconomic stability and
economic growth. This policy stance has also contributed to a substantial increase in inward foreign direct investment to the nation. Due to its high economic growth and rapidly growing population, the U.S. Department of Commerce placed Turkey among the ten largest emerging markets (Aygün, Arslan, Güney, 2008; Dincer, Tatoglu, & Glaister, 2006).

This paper opens with an assessment of the competitive strategy construct, followed by overviews of issues related to strategy in China and Turkey. Next, methods for the present study are outlined. Findings and conclusions follow.

**EVOLUTION OF COMPETITIVE STRATEGY IN THE WEST**

Evaluating the Western perspective on competitive strategy requires an understanding of how the current view has evolved. The interest in competitive strategy presumes a link between a organization’s strategy and its financial performance. Within traditional industrial organization (IO) economics, industry-level factors have the greatest influence on this relationship. Because individual firms tend to have little or no influence over industry structure, IO logic suggests that firms should adapt to the industry structure in order to maximize prospects for success.

Connections between industry structure and firm behavior are not always clear, however. Early strategy researchers noted the inability of the IO framework to explain large performance variances within a single industry. Case studies highlighted firm-level behaviors associated with performance that were not readily addressed in IO models. As a result, the strategic group level of analysis was proposed as a compromise between IO’s deterministic, industry level of analysis and the organization level of analysis inherent to the strategic management discipline (Hergert, 1983; Porter, 1981).

Strategic groups describe apparent clusters of firms that exhibit similar or homogeneous behavior within a somewhat heterogeneous industry environment (Fiegenbaum, McGee, & Thomas, 1988). This perspective maintained a focus on groups of organizations, but acknowledged the existence of multiple groups within a single industry based on factors such as organizational goals, strategies, and collections of resources (McGee & Thomas, 1986; Newman, 1973; Porter 1973). As strategic group assessments identified clusters of businesses employing similar strategies, researchers began to categorize similarities within the strategic groups across studies. Business strategy typologies identified several generic strategic approaches and were developed and utilized as a theoretical basis for identifying strategic groups in industries. Conceptually, generic strategy typologies are logical extensions of strategic group research and at least historically represent a single broad perspective on the strategy-performance relationship, namely the notion that firm performance is a function of strategic factors that are common across some—but not necessarily all—rivals in a given industry (Blankson & Kalafatis, 2004; Devaraj, Hollingsworth, & Shroeder, 2001; Wong & Merrilees, 2005).
Porter’s (1985) generic strategy typology is most notable. According to Porter, a business can maximize performance either by striving to be the low cost producer in an industry or by differentiating its line of products or services from those of other businesses. Either of these two approaches can be accompanied by a focus of organizational efforts on a given segment of the market. Further, a business attempting to combine emphases on low costs and differentiation invariably will end up “stuck in the middle” (Porter, 1980, p. 41), a notion that received considerable early support (Hambrick, 1981, 1982; Hawes & Crittendon, 1984). Whereas Porter contends that the assumptions associated with low costs and differentiation are incompatible, others have argued that businesses successfully combining low costs and differentiation may create synergies that overcome any tradeoffs that may be associated with the combination (Buzzell & Gale, 1987; Buzzell & Wiersema, 1981; Hall, 1983, Hill, 1988; Murray, 1988; Parnell, 1997; White, 1986; Wright, 1987).

Dissatisfaction with the limited emphasis placed on the role of organization-specific factors in strategic group analysis and typology extensions may have triggered a renewed interest in firm resources as the foundation for a firm’s competitive strategy (Barney, 1986, 1991; Grant, 1991; Hatch & Dyer, 2004; Lawless, Bergh, & Winstead, 1989; Mahoney & Pandian, 1992; O’Regan & Ghobadian, 2004; Wernerfelt, 1984). The resulting paradigm, resource-based theory emphasizes unique firm capabilities, competencies, and resources in strategy formulation, implementation, and performance (Dutta, Narasimhan, & Rajiv, 2005; Kor & Mahoney, 2005). A growing body of empirical literature supports link between organization-specific resources and firm performance (Ray, Barney, & Muhanna, 2004).

The contributions of the resource-based view notwithstanding, much of our understanding of competitive strategy can still be traced to Porter’s (1985) seminal low-cost-differentiation-focus framework. His work has received considerable support in the literature and marked a key transition in the field by beginning to integrate organization-specific factors into a model of firm performance dominated by the industrial organization perspective.

Recently, however, much of the prominent work in the business strategy literature has shifted from a typology orientation to a heightened role of organization-specific factors as characterized by the resource-based perspective (Foss & Knudsen, 2003; Ray, Barney, & Muhanna, 2004). This focus on firm resources has further defined the nature and complexities associated with variations across organizations (Barney, 2001; Barney, Wright & Ketchen, 2001; Priem & Butler, 2001). The pace and intensity of change in the global business environment have become much more pronounced during the past two decades as well. As a result, speed—response time to competitors and customers—has become more valuable as a competitive weapon. In addition, the Internet has minimized the importance of physical boundaries and distance. In many instances, it can be leveraged to enable firms to serve larger markets more efficiently (Kim, Nam, & Stimpert, 2004).
In the 2000s, organizational economics (OE)—integrating perspectives such as agency theory, incentives, transaction cost theory, and even property rights theory—sought to address the shortcomings associated with IO, strategic groups, and the resource-based perspective (Fulghieri & Hodrick, 2006; K. Foss & N. Foss, 2005; Gibbons, 2003). OE scholars integrate the tools and theories originally established for the industry level of analysis with new insights and approaches more appropriate for the firm level (Sheehan & Foss, 2007). OE is not limited to issues with strong traditional ties to the economics field, however. Challenges associated with managing managers, for example, are strategic to human resource management concerns. The OE perspective sheds new light on the issue by viewing senior management as a key resource that to be attracted, developed, and harvested. By incorporating transaction costs, agency theory, and other corporate governance concerns into the analysis, scholars are expanding the boundaries of the competitive strategy field (Boxall & Gilbert, 2007; Kim & Mahoney, 2005).

**STRATEGIC MANAGEMENT IN CHINA**

Prior to the late 1970s, the Chinese economy was almost entirely centrally planned (Su, 2001). Indeed, the development of strategic management concepts in China has been facilitated by a pro-market shift over the past three decades. The emergence of market economies and the incorporation of management approaches from the West have played important roles in this process. The notions of competition and strategic management are common to Chinese executives today (Zhang, 2005).

In terms of strategic decision-making, Chinese executives tend to rely on accumulated wisdom, holistic thinking, and experience to make decisions, whereas their American counterparts emphasize compartmentalization, rationality, and objectivity (Scarborough, 1998; Wall, 1990). Experienced managers, not necessarily those who are best trained, make the major decisions in Chinese organizations (Chong, 1987; Leung & Yeung, 1995; Redding, 1987; Tang and Ward, 2003). Unlike Western managers, Chinese managers emphasize flexible decision-making based more on trust and less on contracts (Tang and Ward, 2003). Major decisions are made after the contract is signed, while long, detailed contracts are viewed as detriments to the future business relationship.

Chinese executives also tend to demonstrate high uncertainty avoidance relative to their American counterparts (Hofstede, 1980; Lockett, 1988). As such, security, stability, and predictability are highly valued in contemplating the direction of an organization. This is not to suggest that Chinese managers are unskilled strategic thinkers, but rather that they tend to prefer predictability and consistency over potential payoff in the evaluation of strategic opportunities. This uncertainty avoidance, coupled with the cultural emphasis on thrift and productivity, tends to translate into cost leadership strategies for many Chinese businesses, whereas the American
emphasis on uniqueness and individuality tend to translate into approaches based on differentiation and innovation (Merrilees & Miller, 1999; Wah, 2001).

Although strategic planning is generally a top management level phenomenon, the participation from middle and lower ranks often seen in the West is much less common in China. Strategic plans are typically announced to middle managers, who are responsible for putting them into action. Yang and Duan (1998) examined the importance of various strategic goals among Chinese firms. The most important factor was profitability, followed by production efficiency, marketing and sales, general management performance, research and development, human resources, and social responsibility. Their empirical findings suggest that most Chinese firms remain primarily concerned with traditional business goals.

Yang and Duan (1998) also examined the link between the external environment and strategic planning. Scientific development ranked first, followed by customers, suppliers, competitors, global concerns, regulations, economic trends, and socio-cultural forces. They also highlighted the increased effect of information technology on strategic planning. In addition to the application of more sophisticated modeling, the development of the Internet has also facilitated more effective environmental scanning. Analytic techniques have surfaced in recent years, although their application is not universal, especially in smaller firms.

**STRATEGIC MANAGEMENT IN TURKEY**

Strategic planning was not a common practice in Turkey prior to the 1960s, and only gained acceptance in the 1980s (Akgemici, 2007; Dincer, 2003). Today, however, strategy concepts are widespread in Turkish organizations, with many organizations planning for horizons of five years or greater (Dincer & Tatoğlu, 2002; Dincer, Tatoğlu, & Glaister 2006; Eren, Aren, & Alpkan, 1997, 2000). Moreover, instead of preparing strategic plan at certain intervals, some Turkish organizations have adopted a continuous approach to the process (Barca, Karayorgulu, & Köseoğlu, 2006). Others have departments dedicated to strategic planning (Eren et al., 2000).

Strategic decision making in Turkey remains largely centralized, formal, relatively standardized, and based on business intelligence (Dincer & Tatoğlu, 2002; Dincer, et. al, 2006). Dincer and Tatoğlu (2003) and Glaister and associates (2008) found a strong correlation between formal strategic planning levels in large organizations and firm performance. Glaister and associates’ results also suggest moderating roles played by environmental turbulence, organizational structure and firm size on the strategic planning-performance link.
Increases in strategic planning have also affected the speed at which strategic decisions are made in Turkey (Zehir & Özşahin, 2005). Factors such as participation, autonomy, formation, and innovation influence the strategic-decision making process as well. Organizations established with foreign capital typically employ such techniques as the SWOT (strengths, weaknesses, opportunities, and threats) analysis and scenario planning, while domestic organizations tend to assess environmental conditions through economic prediction models (Barca et al., 2006; Erdil & Kitapçı, 2004). Hence, domestic companies do not use modern techniques as commonly as foreign companies, and some are not even aware of such techniques (Dinçer & Tatoğlu, 2002; Dincer, et. al., 2006). Small and medium sized enterprises (SMEs) sometimes use economic models but rarely employ other techniques (Şimşek, et. al., 2006).

Dinçer & Tatoğlu (2002) and Dincer and associates (2006) found a predominant emphasis on relative strengths and weaknesses of the organization when Turkish firms participate in strategic planning. Hence, strategic activities are primarily viewed as setting the (mostly quantitative) goals and business targets of an organization (Alpkan, et. al., 2005; Baraz, 2008). Members of public organizations tend to adhere strictly to these goals. Hence, domestic organizations operating in Turkey follow more reactive and current-state strategies, while organizations established with foreign capital are more proactive.

The link between organizational goals and strategy in Turkey is an interesting one. Eren and associates (1997, 2000) found a preference for strategic objectives in Turkish organizations to include growth, increasing market share, improving efficiency, enhancing the prestige in the market, innovation, and market diversification (see also Tutar et al., 2007). However, profitability, decreasing production costs with external factors, technologic innovation, and increasing competitive power are not as commonly included as strategic objectives. Participating organizations viewed inflation, devaluation, interest targets, and taxes as important threats, while emphasizing international relations, competition, prospective imports and exports, economic growth, and saving rates as important opportunities. Barca and associates (2006) found that top management adapt the following as strategic goals in the following order: focusing on activities that enhance competitive advantage, exploiting differences in resources and capabilities, being innovative, defending current competitive positions, and maximizing profit.

Analytic techniques are gaining popularity, however, even among small and medium-sized enterprises (SMEs). Kök’s (2004) assessment of SMEs found the greatest preference for analytic approaches to strategic management, followed by a future-orientation and defensive risk avoidance behaviors. Çelik ve Karadal’s (2007) study of SMEs found that the problems of developing marketing strategies and pricing of services and goods usually influence firm performance.
Cost leadership strategies in Turkey remain pervasive. Kısacık’s (2005) study of 104 businesses found that most emphasize a low cost approach, perceiving a link between low costs and growth. More than half of the respondents also employed differentiation approaches, however. Some incorporate elements of a focus strategy as well, while mimicking the strategic moves of rivals—especially in terms of pricing—is common. Gürpinar and Barca (2007) also found strong support for an overarching low cost approach among Turkish firms. Demirbag and Tatoglu (2008) studied 79 large industrial organizations, revealing a different set of strategic priorities, including product standardization, access to efficient process technologies, concentric diversification, extending product lines and technology sharing. Information technology has also played an important role in competitive strategies in Turkish organizations (Yıldız, 2008), but cost leadership remains most prominent. Innovation is not seen as being as important (İrmiş & Akça, 2003).

PROPOSITIONS

Three propositions pertaining to strategy and innovation China, Turkey, and the United States are proposed herein. Research and development funds are more readily available in developed nations like the United States. Previous research also supports the notion that managers in executive positions are more likely to favor innovative strategic approaches than are those in lower levels (İrmiş & Akça, 2003; Parnell, 2007; Parnell & Menefee, 2007; Yang & Duan, 1998). A general preference for an innovative approach has been found in American organizations, whereas their Turkish counterparts have favored a low cost approach (Gürpinar & Barca, 2007; İrmiş & Akça, 2003; Kısacık, 2005; Ray, Barney & Muhanna, 2004; Parnell, 2007; Parnell & Menefee, 2007). Empirical support for this type of assertion in emerging economies like Turkey and China is limited, however. It is proposed that this relationship will hold true in all three countries:

Proposition 1: American respondents generally will place greater emphasis on innovative strategies than on cost leadership strategies.

Proposition 2: Turkish respondents generally will place greater emphasis on cost leadership strategies than on innovative strategies.

Proposition 3: Chinese respondents generally will place greater emphasis on cost leadership strategies than on innovative strategies.
METHODS

The instrument utilized in this study contained Pelham and Wilson’s (1996) innovation strategy and low cost strategy scales, and Parnell, Lester, and Menefee’s (2000) performance satisfaction scale. Demographic and personal items were also included, such as age, gender, management and organizational experience, and position in the firm.

A total of 595 responses were completed, 261 in Turkey, 219 in China and 335 in the United States. Data were collected from managerial personnel in 190 firms located in Turkey. Turkish respondents were randomly selected from a group of 1000 firms listed at the business database at representing a variety of manufacturing and service enterprises derived from Google’s business database (www.google.com.tr). The sample included small and large organizations, domestic and global enterprises, and manufacturing and service firms. Surveys were mailed to executives in these firms, with a second mailing a week later. In the end, 274 surveys were returned from 190 firms. Thirteen were not usable, leaving 261 for analysis, a response rate of 26.1 percent.

Data were randomly collected from two management clubs, each of which consists of more than 350 members from firms in various industries covering finance, logistics, IT, business management industries and so on. One club is in Beijing City, the capital of China and the other is in Wuxi City of Jiangsu Province of southeastern China. A total of 700 surveys were distributed, 267 surveys were returned by emails and hardcopy, although 47 were substantially incomplete or otherwise unusable, resulting in a sample size of 219 and a response rate of 31.3 percent.

American respondents were selected from the membership of a Chamber of Commerce in a mid-size city in the Southeastern United States. A total of 977 surveys were distributed to the membership. The response rate was 34.2 percent, with 335 surveys returned.

Females outnumbered males in the American sample 57.2 to 42.5 percent. Males outnumbered females in the Turkish sample, however, 69.3 to 30.7 percent. The large percentage of Turkish males in the sample is not problematic, however, given their strong representation in the work force. Respondents were dispersed across management levels in both samples, with lower and middle middles comprising the largest groups. The average age for the composite sample was 36.7 years, with respondents reporting 7.8 years of management experience and 7.3 years of experience with the present organization. Age and experience differences were not significantly different across samples. A summary of key sample data is presented in table 1. An explanation of the scale items is presented in table 2.
TABLE 1: THE SAMPLE

<table>
<thead>
<tr>
<th></th>
<th>China Only (n=219)</th>
<th>Turkey Only (n=334)</th>
<th>U.S. Only (n=261)</th>
<th>Composite (n=814)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequencies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (one respondent did not make a selection)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>139 (63.5%)</td>
<td>181 (69.3%)</td>
<td>142 (42.5%)</td>
<td>462 (56.8%)</td>
</tr>
<tr>
<td>Females</td>
<td>80 (36.5%)</td>
<td>80 (30.7%)</td>
<td>191 (57.2%)</td>
<td>351 (43.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>261</td>
<td>333</td>
<td>813</td>
</tr>
<tr>
<td><strong>Management Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-managers</td>
<td>47 (221.5%)</td>
<td>36 (13.8%)</td>
<td>73 (21.9%)</td>
<td>156 (19.2%)</td>
</tr>
<tr>
<td>Lower Managers</td>
<td>113 (51.6%)</td>
<td>36 (13.8%)</td>
<td>113 (33.8%)</td>
<td>262 (32.2%)</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>51 (23.3%)</td>
<td>115 (44.1%)</td>
<td>99 (29.6%)</td>
<td>265 (32.6%)</td>
</tr>
<tr>
<td>Top Managers</td>
<td>8 (3.7%)</td>
<td>74 (28.4%)</td>
<td>49 (14.7%)</td>
<td>131 (16.1%)</td>
</tr>
<tr>
<td><strong>Descriptive Data (Mean &amp; Standard Deviation)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>32.02 sd=5.4</td>
<td>36.97 sd=9.3</td>
<td>36.47 sd=10.7</td>
<td>35.43 sd=9.3</td>
</tr>
<tr>
<td>Management Experience</td>
<td>3.15 sd=3.1</td>
<td>8.84 sd=8.2</td>
<td>7.02 sd=8.0</td>
<td>6.56 sd=7.4</td>
</tr>
<tr>
<td>Experience with Organization</td>
<td>4.20 sd=3.2</td>
<td>7.90 sd=7.1</td>
<td>6.89 sd=7.4</td>
<td>6.49 sd=6.6</td>
</tr>
</tbody>
</table>

TABLE 2: EXPLANATION OF SURVEY ITEMS
<table>
<thead>
<tr>
<th>Item</th>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRATINN1</td>
<td>New product development</td>
</tr>
<tr>
<td>STRATINN2</td>
<td>Strict product quality control procedures</td>
</tr>
<tr>
<td>STRATINN3</td>
<td>Developing new products and refining existing ones</td>
</tr>
<tr>
<td>STRATINN4</td>
<td>Innovation in the manufacturing process</td>
</tr>
<tr>
<td>STRATINN5</td>
<td>Developing products for higher priced markets</td>
</tr>
<tr>
<td>STRATCOST1</td>
<td>Pricing below competitors</td>
</tr>
<tr>
<td>STRATCOST2</td>
<td>Continuous, overriding concern for lowest cost per unit of production</td>
</tr>
<tr>
<td>STRATCOST3</td>
<td>Production in lower priced market segments</td>
</tr>
<tr>
<td>PERSAT1</td>
<td>Satisfaction with operating profits</td>
</tr>
<tr>
<td>PERSAT2</td>
<td>Satisfaction with profit to sales ratio</td>
</tr>
<tr>
<td>PERSAT3</td>
<td>Satisfaction with cash flows from operations</td>
</tr>
<tr>
<td>PERSAT4</td>
<td>Satisfaction with return on investment</td>
</tr>
<tr>
<td>PERSAT5</td>
<td>Satisfaction with return on assets</td>
</tr>
</tbody>
</table>

**FINDINGS**

Factor analysis results supported each of the scales, with two exceptions (see table 3). Factor loadings and coefficient alphas were in excess of .600 for all three scales for each national sample except for the innovation and cost leadership scales for China. One item was particularly problematic in both instances. First, STRATINN2—strict product quality control procedures—produced a loading of only .387 on the innovation scale. When this item was removed from the scale, factor loadings of .680, .612, .518, and .624 were generated for an amended scale containing the first, third, fourth, and fifth items respectively. A single factor explained 37.4 percent of the variance, and the coefficient alpha increased, but only to .441. In addition, a correlation matrix demonstrates that each of the five original items is significantly associated with some, but not all of the other items in the scale. Hence, application of the strategy innovation scale to the Chinese sample provides an approximate measure of the construct, but the Chinese conceptualization of an innovative strategy appears to differ from that in Western organizations.

Second, STRATCOST3—production in lower priced market segments—produced a substantial and negative loading (-.484) on the cost leadership scale. To investigate the situation further, the eight strategy items were factor analyzed together, producing a two-factor solution.
with one item—STRATCOST1—that did not load sufficiently on either factor. When STRATCOST1 was removed, the remaining items appear to converge around two factors (see table 4). The eigenvalues for this two-factor seven-item scale were 1.666 and 1.322, with two factors accounting for 42.7 percent of the variance. The first strategic factor involves continuous improvement and innovation in manufacturing techniques in an effort to maintain quality while reducing costs. The second factor involves the development of new products tailored for specific market segments, either higher or lower priced.

### TABLE 3: FACTOR ANALYSIS OF THE STRATEGY INNOVATION, COST LEADERSHIP, AND PERFORMANCE SATISFACTION SCALES

<table>
<thead>
<tr>
<th></th>
<th>China Only (n=219)</th>
<th>Turkey Only (n=334)</th>
<th>U.S. Only (n=261)</th>
<th>Composite (n=814)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy Innovation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN1</td>
<td>.635</td>
<td>.816</td>
<td>.824</td>
<td>.785</td>
</tr>
<tr>
<td>STRATINN2</td>
<td>.387</td>
<td>.785</td>
<td>.824</td>
<td>.739</td>
</tr>
<tr>
<td>STRATINN3</td>
<td>.612</td>
<td>.786</td>
<td>.835</td>
<td>.775</td>
</tr>
<tr>
<td>STRATINN4</td>
<td>.561</td>
<td>.863</td>
<td>.772</td>
<td>.783</td>
</tr>
<tr>
<td>STRATINN5</td>
<td>.556</td>
<td>.652</td>
<td>.709</td>
<td>.673</td>
</tr>
<tr>
<td>Alpha</td>
<td>.439</td>
<td>.837</td>
<td>.852</td>
<td>.805</td>
</tr>
<tr>
<td>Variance explained</td>
<td>31.0%</td>
<td>61.4%</td>
<td>63.1%</td>
<td>56.6%</td>
</tr>
<tr>
<td><strong>Strategy Cost Leadership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATCOST1</td>
<td>.654</td>
<td>.794</td>
<td>.814</td>
<td>.776</td>
</tr>
<tr>
<td>STRATCOST2</td>
<td>.712</td>
<td>.752</td>
<td>.867</td>
<td>.794</td>
</tr>
<tr>
<td>STRATCOST3</td>
<td>-.484</td>
<td>.788</td>
<td>.861</td>
<td>.725</td>
</tr>
<tr>
<td>Alpha</td>
<td>.007</td>
<td>.673</td>
<td>.803</td>
<td>.647</td>
</tr>
<tr>
<td>Variance explained</td>
<td>39.0%</td>
<td>60.5%</td>
<td>71.8%</td>
<td>58.7%</td>
</tr>
<tr>
<td><strong>Performance Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERSAT1</td>
<td>.620</td>
<td>.778</td>
<td>.838</td>
<td>.773</td>
</tr>
<tr>
<td>PERSAT2</td>
<td>.668</td>
<td>.831</td>
<td>.843</td>
<td>.802</td>
</tr>
<tr>
<td>PERSAT3</td>
<td>.704</td>
<td>.819</td>
<td>.834</td>
<td>.806</td>
</tr>
<tr>
<td>PERSAT4</td>
<td>.623</td>
<td>.832</td>
<td>.894</td>
<td>.828</td>
</tr>
<tr>
<td>PERSAT5</td>
<td>.698</td>
<td>.736</td>
<td>.877</td>
<td>.790</td>
</tr>
<tr>
<td>Factor 1</td>
<td>Factor 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN2 Strict quality control procedures</td>
<td>.540</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN3 Developing and refining existing products</td>
<td>.523</td>
<td>.248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN4 Innovation in manufacturing process</td>
<td>.673</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATCOST2 Continuing, overriding concern for low cost</td>
<td>.691</td>
<td>-.236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN1 New product development</td>
<td>.209</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATINN5 Products in higher priced markets</td>
<td>.046</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STRATCOST3 Produce in lower priced market segments</td>
<td>-.114</td>
<td>.556</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 5: PAIRED T-TESTS FOR COMPETITIVE STRATEGY DIMENSIONS

<table>
<thead>
<tr>
<th>Nation</th>
<th>Strategy 1</th>
<th>Strategy 2</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>3.1808 Innovation</td>
<td>2.8256 Cost</td>
<td>6.303</td>
<td>.000</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.8506 Innovation</td>
<td>3.2261 Cost</td>
<td>10.488</td>
<td>.000</td>
</tr>
</tbody>
</table>
The first proposition was supported, as the mean response for innovation items was significantly higher than the mean response for low cost items among American respondents (see table 5). The second proposition was rejected, however. The mean response for innovation items was also significantly higher than the mean response for low cost items among Turkish respondents. The third proposition could not be tested, however. Due to unacceptable loadings in the Chinese sample, the comparisons in table 5 are provided only to underscore the lack of conceptualization along the lines of innovation and cost.

DISCUSSION

The U.S. respondents were predictable. Composite scores for innovation and cost strategies were significantly correlated at the .05 level (.402), and each was significantly correlated with performance satisfaction (.255 and .256 respectively).

Considering Turkey, the present study highlights a greater than expected emphasis on innovation. Like the American sample, composite scores for innovation and cost strategies were significantly correlated (.287), and each was significantly correlated with performance satisfaction (.123 and .127 respectively). There are several possible explanations for these findings.

First, the Turkish economy has experienced significant change in recent years. Direct investment from developed nations has increased markedly, most notably from the United States and the European Union. The resulting competitive environment emerging in the country has resulted in the more effective application of strategic management tools by Turkish managers. In this environment, priority is given to the techniques that foster innovative strategies built on monitoring and adapting to shifts in the global environment.

Second, Turkish firms are under greater pressure to comply with Western norms as they become more involved in the global economy. This has led to the fast adaptation of strategic planning techniques and tools by managers into applications and has produced a strategy...
development process similar to that of the foreign firms (Dinçer et al., 2006). Hence, Turkish managers may pursue innovation and cost leadership strategies with greater intensity because of their heightened achievement orientation (Arslan, 2001).

Third, the Turkish government has introduced a number of incentives for firms to improve global competitiveness. These incentives decrease costs for investments both inside and outside of the country, and foster research and development efforts. Hence, one might argue that the government is playing a key role in supporting both low cost and innovation strategies.

Finally, compared to the business environment in the United States, the environment in Turkey can be characterized as highly ambiguous. Political and economic crises have been common in recent years, a phenomenon that has encouraged organizations to rely more heavily on short-term plans. Because cost containment has greater short-term payoffs, many firms have concentrated their efforts primarily on costs. Such firms prefer to imitate the successes of firms in other countries as rapidly as possible—and with minimal expenses—thereby ensuring the maximum measure of success in the short term. This, however, does not explain the emphasis on innovation found among Turkish firms in the present study.

Considering China, the Western notions of strategy constructs such as “cost leadership” and “innovation” were not necessarily viewed as such in China. Interestingly, evidence in table 4 suggests an alternative distinction. The first appears to be associated with an emphasis on quality and costs in production, whereas the second appears to be associated with new product development. The former was significantly preferred to the latter (see table 5), although neither was significantly associated with performance satisfaction. Additional research is required to assess this conceptualization of strategy.

The fact that the first cost item was not included in either of the strategy factors suggests that the notion of a low cost/low price strategy (e.g., STRATCOST1 and STRATCOST2) is not associated with positioning products in lower priced segments in China. Rather, such a strategy is seen as consistent with market segments populated by higher cost/higher price products. In other words, low cost Chinese producers seek direct competition by placing their products alongside those of their higher priced rivals instead of indirect competition by avoiding higher end segments of the market.

**CONCLUSIONS AND FURTHER RESEARCH**

This paper compares and contrasts the nature of competitive strategy and its link to firm performance in Turkey and the United States. Turkish respondents reported higher levels of both innovation and cost-oriented strategies than did their American counterparts. Both strategies
were positively linked to performance in both samples. These findings reinforce previous research in both Turkey and the United States.

Although there is strong evidence that participation in the strategic planning process tends to improve performance (Greenley, 1994), there is still much to be learned about the nature of the strategy-performance linkage. This is especially true in emerging nations like China and Turkey. As such, several realistic avenues for future research have been identified. First, replications of the present study in other emerging nations may identify factors that are common to developing nations. Increased investment and trade between Turkey and the rest of the world will inevitably broaden the impact of crises that occur. Without such research, the generalizability of these findings to other emerging economies remains tenuous.

In a similar vein, replications should broaden the notion of competitive strategy. In Turkey, for example, information technology has become a key part of business strategies in many organizations. SMEs leverage information technologies primarily to enhance product quality. Aslan and Özata’s (2007) study of SMEs in the automotive industry found a positive correlation between the use of information technologies by organizations and innovation, competitive power and marketing capacity. The findings indicate that marketing capacity and innovation have positive and significant influences on entrepreneurial capacity. The use of information technologies is also a function of organizational size, export activity, and knowledge levels of the firm’s top managers. However, Soysal and associates (2006) found that while SMEs in the textile industry see information technologies as important means of catching up with large competitors, they do not make full use of them. Turunç & Polat (2007) revealed only a moderate link between the use of information technologies and organizational performance among SMEs (see also Bakan & Taşlıyan, 2002; Erdil & Kitaç, 2005).

Second, the application of Western scales to non-Western samples remains a difficult process (Peng, Lu, Shenkar, & Wang, 2001), and the present study was no exception. When scales are not translated to account for language and cultural differences for generalizability sake, scale reliabilities generally suffer as a result. However, when scales are translated and/or modified to address cultural differences, then direct comparisons between distinct cultural groups are tenuous at best. Solving this dilemma is not easy. Nonetheless, future research should embrace multiple approaches to develop a comprehensive understanding of the phenomena.

Third, Western models and instruments typically do not measure the constraints in which employers in emerging economies are required to function (Adler, Campbell, & Laurent, 1989). Specifically, Chinese applications of Western survey instruments such as the scales utilized in the present study have their limitations. Punnett and Shenkar (1994) warned against interviews, experiments and observational approaches where great religious differences exist between the researcher's home culture and that being studied. In addition, survey research is feasible when
any language barriers are overcome, but less reliable when educational differences are also highly pronounced. Further, one’s values can influence item interpretation and create response bias.

As an alternative, researchers may choose to develop instruments from indigenous Chinese values (e.g., Fahr, Tsui, Xin, & Cheng, 1998) to maximize measurement precision. Unfortunately, doing so is expensive and typically produces results that are incomparable with Western literature (Peng, Lu, Shenkar, & Wang, 2001). Additional research that integrates both approaches in hypothesis testing may lend more robust and reliable conclusions. Further, Farh and associates’ (1997) development of the Chinese organizational citizenship behavior (OCB) scale considered cultural variability within the Chinese culture, not between or among cultures. Hence, additional research that moves beyond pitting one culture against another will also be helpful.

Following this logic, since many management constructs developed in advanced Western nations may be inappropriate in emerging economies, new constructs may more accurately explain management behavior. There is also a need for modified research approaches to compare and contrast practices among widely divergent cultures without forcing one culture into the construct definition appropriate in another. Researchers must seek applications of management concepts so that existing theory can be applied to developing countries while at the same time allowing for substantial theoretical modifications when findings cannot be readily explained by prevailing models.

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Kocatepe Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, 22-24 Mayıs, Afyon, Turkey, 777-794.


THE EFFECTS OF CORPORATE GOVERNANCE ON FAMILY FIRMS RISK TAKING: EVIDENCE FROM TAIWANESE ELECTRONICS INDUSTRIES

Weichieh Su, University of Texas at Dallas, weichieh.su@gmail.com

INTRODUCTION

What are the effects of corporate governance on risk taking of family firms? The debate arises from whether the separation of ownership and control facilitate firm growth (Fama and Jensen, 1983). Many scholars have joined the debate over whether family firms, whose ownership and control are concentrated, have better firm performances (for a review, see Peng and Jiang, 2009). Institutional and social contexts are found to matter in explanations for the mixed results (Fukuyama, 1995; La Porta, 1999; Peng and Jiang, 2009).

There have been many discussions about the effects of corporate governance on family firm performance in Western and Asian contexts (Anderson and Reeb, 2003; Burkant, Panunzi, and Shleifer, 2003; Heugens et al., 2009). But for the effects of corporate governance on family firms’ risk-taking, mainly the discussions were focused on Western contexts, arguing that the concentration of family ownership and control favors entrepreneurship (Aldrich and Cliff, 2003; Astrachan, Zahra, and Sharma, 2003; Zahra, 2005). Little has been explored about the effects of corporate governance on family firms’ risk-taking in newly industrialized economies. Perspectives from newly industrialized countries where some of the economies emerge by high technological innovation seem void (Peng et al., 2008; Young et al., 2008; Hoy and Verser, 1994). In this paper, we accordingly ask: Does the concentration of family ownership and involvement facilitate firms’ risk-taking behavior in newly industrialized countries? Can outside directors help? What kind of outside directors can truly help firms take risk during institutional transition?

Samples from Taiwan offer an opportunity to deal with the above questions. First, family firms dominate the Taiwanese economy. More than half of the listed companies in Taiwanese Stock markets are family businesses and more than half of the family members dominate the boards of directors (Filatotchev, Lien, and Piesse, 2005; Yeh, Lee, and Shu, 2008). Second, Taiwanese firms have a positive risk orientation. According to the Global Competitiveness Report 2009-2010, published by the World Economic Forum, ‘Taiwan has a large pool of scientists and engineers, and it benefits from high company spending on R&D and strong collaboration between research institutes and the business sector in innovation.’ Third, Taiwan is going through an institutional transition, ex., a reform on corporate governance system since 2002. It offers a natural experiment to examine the
effects of corporate governance on firms during institutional change (Peng, 2004).

This paper, therefore, fills a void in the current literature about family business and corporate governance in three ways. First, we address how family ownership and involvement affect firms’ risk taking in lens of agency theory as well as a principal-principal conflict (La Porta et al., 2002; Young et al., 2008). Second, based on a sample from 314 listed Taiwanese companies in the electronics industry, this paper empirically examines the effect of corporate governance on family firms’ risk taking, expanding the research into newly industrialized economies. Third, in addition to consideration of national contexts, this paper also focuses on the changes in institutional systems, providing more fine-grained pictures of the effects of corporate governance on family firms’ risk taking during the institutional transition.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Family ownership

According to agency theory, the separation of ownership from management causes agency problems which, in turn, affect shareholders’ wealth (Jensen and Meckling, 1976). The opportunistic behavior derived from agency problems may decrease in family firms because the ownership and management are controlled by family members (Berle and Means, 1932). Since the objectives of principals and agents are aligned, the close alignment might ensure effective decisions — maximizing families’ wealth and perpetuating the firms’ existence (Schulze et al., 2003).

Based on the sample from S&P 500 firms, Anderson and Reed (2003) find there is a nonlinear relationship between family ownership and firm performance. That is, although high family ownership outperforms those with low or none in term of financial indexes and market shares, too much family ownership dampens firm performance. Based on 209 U.S. manufacturing family firms, Zahra (2005) finds that family ownership and involvement facilitate entrepreneurship. Both Anderson and Reed (2003) and Zahra (2005) attribute the outperformance to the concentrated ownership, which lowers the potential managerial opportunistic behaviors, because firms with high family ownership have incentives and power to control the managers’ behaviors not only to increase their wealth but also to entrench family’s position. Miller and Le-Breton-Miller (2006) also echo this perspective, arguing that members in family business are the stewards of the business. Stewards are proposed to have more fealty and commitment to organizations. The stewards might even sacrifice themselves to achieve organizational goals (Davis, Schoorman, and Donaldson, 1997).

However, those findings are derived from Anglo-American contexts and therefore cannot be generalized in non Anglo-American environments (Shleifer and Vishny, 1997; Phan, 2001). Most
family firms in Asian countries, including Taiwan, are characterized by prevalent pyramidal groups and cross-holdings, and have inactive markets for corporate control (Claessens et al., 2000; La Porta et al., 1999). Therefore, many studies that focus on Asian settings find that the benefits of concentrated family ownership and involvement do not outweigh the cost they incur (Fogel, 2006; Morck et al., 2005). That is, family members with majority ownership and concentrated management might appropriate the wealth of minority shareholders, causing another agency problem (Cronqvist and Nilsson, 2003; Villalonga and Amit, 2006). This principal-principal conflict is especially dominant in Asian countries (Young, et al., 2008).

Based on 228 listed Taiwanese companies from different industries Filatotchev et al. (2005) cannot find that family ownership and control are positively associated with performance. Yeh et al. (2008) use Taiwanese samples and find that controlling shareholders exploit the wealth of minority shareholders because the latter are comparatively weakly protected. Heugens et al. (2009) use meta analysis and echo the above findings that the relationship between inside concentrated ownership and firm performance is negative and that the tunneling problem is common in Taiwan.

**Board of directors**
The purpose of the board of directors is to supervise whether the agents’ behaviors are in line with the interests of shareholders. A healthy board can institutionalize organizational charter to protect and maximize the wealth on behalf of the shareholders (Eisenhardt, 1989; Fama and Jensen, 1983). Board composition is accordingly important (Dalton, et al., 1998; Pearce and Zahra, 1992).

Some studies show that family members that are highly involved in the board of directors are likely to exhibit altruism (Schulze et al., 2003). This altruistic behavior arising from family members not only facilitates the communication but also enhances the cooperation, decreasing the asymmetry among board members (Daily and Dollinger, 1992). Despite those benefits, altruism eventually determines board members to make decisions arbitrarily and brings about perquisites and privileges (Schulze, et al., 2003). Altruism in family firms results in cronyism in the end. Besides, while family members enjoy the perquisites and privileges, their exit costs increase. This, in turn, enhances the negative entrenchment (Wiseman and Gomes-Mejia, 1998). That is, majority shareholders have incentives to entrenched their position by making arbitrary decisions (Claessens, et al., 2002). Major family members easily have conflicts with non-family members. In addition, even family members might arouse political wrestle with each other to fight for resources for their descendants (Demsetz and Lehn, 1985).

DeAngelo and DeAngelo (2000) find that while family firms have extra earnings, they decrease capital expenditures, and instead invest in other unrelated personal activities. Therefore, while family
firms face risky investment decisions, they take the families’ interest into consideration along with the businesses’. In order to avoid jeopardy to family wealth, business with high family ownership and involvement might take less risk. Thus, we propose the hypotheses that:

**H1:** In Taiwan, family ownership is negatively related to firm-level risk taking.

**H1b:** In Taiwan, family involvement is negatively related to firm-level risk taking.

**Outside directors**

Family business usually lacks a sound system of corporate governance (Schulze et al., 2003). The introduction of outside directors can help family business access specific professional knowledge (Carpenter and Westphal, 2001) and connect with other networks (Certo, Daily and Dalton, 2001). Outside directors accordingly can support organizational restructure (Pearce and Zahra, 1992), organizational innovation (Zahra, 1996), international expansion (Tihanyi, Hoskisson and Hitt, 2003), and enhancement of organizational capability (Kor and Misangyi, 2008).

The positions of outside directors in the board manifest the value of corporate governance, especially in the context of family business. Anderson and Reed (2004) find that outside directors usually represent minority shareholders to counter the opportunistic behaviors of the majority shareholders in the family business. Shleifer and Vishny (1997) find that outside directors play a balanced role in the family business to avoid the appropriation of resources. Built on the sample of 405 listed firms in China during institutional transition, Peng (2004) finds that outside directors facilitate firm performance in term of sales growth. Additionally, in lens of resource dependence, Peng (2004) argues that outside directors help firms in China cultivate relationships (guanxi) with other firms and help them access external information and resources by interlocks among boards.

In sum, the increase in the number of outside directors reduces the conflict between majority family shareholders and minority shareholders. The presence of outside directors also facilitates family firms to absorb diversified suggestions, realize environmental changes and take calculated risks. Leaning on the experiences of outside directors, family business can enhance organizational capability (Kor and Misangyi, 2008) to express intrinsic entrepreneurial spirits (Zahra, Hayton and Salvato, 2004; Zahra, 2005) and engage in more risky investments (Aldrich and Cliff, 2003). Thus, we propose the following hypothesis:

**H2a:** In Taiwan, outside directors can positively moderate the relationship between family ownership and risk taking.

**H2b:** In Taiwan, outside directors can positively moderate the relationship between family involvement and risk taking.

**The institutional transition in corporate governance**
Listed companies in Taiwan were not required to have outside directors on their boards until 2002. As the demand for solid corporate governance became stringent, Taiwan Security and Futures Institute required Taiwanese listed companies to include seats for outside directors on their board of directors since 2002. The Securities and Exchange Law\(^1\) came into effect in 2006. Before 2002, listed companies had to voluntarily set positions for outside directors in Taiwan.

Family firms that voluntarily introduce outside directors usually have more transparent financial reports and better management teams. Such companies willingly accept supervision and suggestions from outside directors, positively signaling the companies’ reputation. This positive externality facilitates companies to finance from the public market and recruit talent from schools. Staw and Epstein (2000) argue that firms that voluntarily adopt new business practices are more innovative. Assuming family firms voluntarily adopt outside directors before the law requires it, this demonstrates that family members are not conservative and are willing to let outside directors participate in board decisions, and even supervise business operations. We can imply that these firms are risk-taking.

On the contrary, family firms that appoint outside directors due to law requirements might do so reluctantly, that is they appoint someone who is outside the company but closely connected to the family. These outside directors usually turn out to be affiliated directors, who have family and/or professional relationships with the firm or firm management (Peng, 2004). Under isomorphic pressure (DiMaggio and Powell, 1983), firms would introduce affiliated directors during institutional transition. Such captive outside directors are less objective and lack the original spirit and characteristics of the outside directors—supervision and suggestion (Brickley, Coles, and Terry, 1994). Correspondingly, such family firms are reluctant to accept new business practices and be supervised by someone from outside the family, implying a more conservative position. Thus, we propose the hypothesis:

\[ H3a: \text{During the institutional transition in Taiwan, outside directors strengthen the relationship between family ownership and risk taking more positively in firms that voluntarily introduce outside directors than in those that involuntarily introduce outside directors} \]

\[ H3b: \text{During the institutional transition in Taiwan, outside directors strengthen the relationship} \]

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\(^1\) Securities and Exchange Act, Article 14-2: “A company that has issued stock in accordance with this Act may appoint independent directors in accordance with its articles of incorporation. The Competent Authority, however, shall as necessary in view of the company’s scale, shareholder structure, type of operations, and other essential factors, require it to appoint independent directors, not less than two in number and not less than one-fifth of the total number of directors.”
between family involvement and risk taking more positively in firms that voluntarily introduce outside directors than in those that involuntarily introduce outside directors

METHODS

Sample selection
This study examines the effect of corporate governance on family firms’ risk taking. In term of corporate governance, we consider family ownership, family board members, outside directors and CEO duality. In term of risk taking, we consider research and development expense. All data are obtained from Taiwan Economic Journal Data Bank, which is the most extensive financial database in Taiwan. Considering one of the issues in this study is risk taking, we take companies in the electronics industries as our samples because Taiwanese electronics industries were famous for entrepreneurship. After we delete incomplete data, our sample finally contains 314 listed electronics companies in Taiwan between 2005 and 2007, inclusively.

Measures
We take R&D intensity as a proxy for Risk Taking. Baird and Thomas (1985, 231-232) identified three elements of risk: venturing into the unknown, committing a relatively large portion of assets, and borrowing heavily. R&D embodies these three elements of risk, though arguably. We still follow previous studies to use R&D intensity to measure to the extent that firms engage in risk taking (Chatterjee and Wernerfelt, 1991; Hill and Snell, 1988; Montgomery and Hariharan, 1991; Sanders and Carpenter, 2003). Family Ownership is measured by the proportion of family shares to total shares. Family Involvement is measured by the ratio of family board members to total board members. Outside Director is measured by ratio of outside directors to total board members. The measurements are in tune with previous studies (Astrachan and Kolenko, 1994; Litz, 1995)

In this study we take total assets, employee numbers, debt ratio, return on assets (ROA), and CEO duality as our control variables. Electronics industries comprise different natures of high technological companies. Some focus on intellectual knowledge such as IC designers; other heavily lean on fixed assets such as IC manufacturers. We accordingly consider both total assets and employee numbers as a proxy for firm resources and compute their logarithm to decrease the skew. Previous studies also find that debt ratio and ROA have influences on innovation (O’Brien, 2003; Ghosh, Moon, and Tandon, 2007). In addition, CEO duality has double-edged sword effects (Finkelstein and D’Aveni, 1994), so we take a dummy variable, 1 for CEO duality, to control the effects.

Analyses
This paper utilizes hierarchical regression models to test the effects of corporate governance on Taiwanese family firms’ risk taking. We first introduce the control variables to show basic R-square. We next put the factors of corporate governance to observe the main effects. We then moderate outside director with ownership and involvement to examine whether the change of R-square is significant. In order to lower the concern of multicollinear, we mean center the main variables before moderation. Finally, we divide the sample into two subgroups. Because Taiwan Security and Futures Institute required Taiwanese listed companies to have at least seats for outside directors in board of directors in 2002, we separate our sample according to the listed year of the focal firm. If firms went public before 2002, we tag these firms group 1. These 209 firms could voluntarily set outside directors in their board seats. If firms went public after 2002, including 2002, we tag those firms group 2. Those 105 firms are required to have at least two seats for outside directors. Following the above steps, we separately run hierarchical regression for the two samples to compare the differences of the two results.

Results
Table 1 shows the descriptive statistics and correlations matrix. According to Table 1, we can observe the average family ownership in listed electronics industries is 22.5% and the ratio of family members to total board members is high to 42.6%. Therefore it is a popular phenomenon for family firms to engage in electronics industries. The ratio of outside directors to total directors is 18.2%, failing to the expectation value, 20%, of Securities and Exchange Law, showing that there is still not so popular to have positions for outside directors in Taiwan.

| TABLE 1. DESCRIPTIVE STATISTICS AND CORRELATIONS MATRIX |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| N=314            | Mean             | s.d.             | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                |
| 1. ln(total asset) | 15.764           | 1.317            |                  |                  | 0.824**          |                  |                  |                  |                  |                  |
| 2. ln (employees) | 6.291            | 1.278            |                  |                  |                  |                  |                  |                  |                  |                  |
| 3. Debt ratio    | 36.851           | 15.112           | 0.108            | 0.095            |                  |                  |                  |                  |                  |                  |
| 4. ROA           | 11.281           | 10.579           | 0.113*           |                  |                  | 0.176* -0.435**  |                  |                  |                  |                  |
| 5. CEO duality   | 0.321            | 0.429            | -0.070           | -0.090           | -0.018           |                  |                  |                  |                  | -0.169*          |
| 6. Family ownership (FO) | 22.550          | 15.299           | -0.075           | -0.068           | 0.001            |                  |                  |                  |                  | 0.163** -0.164  |
7. Family involvement (FI) 0.426 0.263 0.003 -0.026 -0.009 -0.160* 0.160* 0.051

8. Outside directors (OD) 0.182 0.157 -0.051 -0.048 -0.042 0.293** -0.111 0.118 -0.294

9. R&D intensity 3.467 3.427 -0.121 -0.013 -0.400** 0.079 0.044 -0.146 -0.239 0.165

***p<0.001; **p<0.01; *p<0.05

Considering the potential of multicollinearity, we check whether the coefficient values of correlation between variables are higher than 0.8. We find that there are no significant correlation between family ownership and family involvement, suggesting that we can examine these two effects on risk taking simultaneously. Even though the correlation coefficient value between assets and employees numbers is 0.824, we keep both of them in order to control and distinct the features of intellectual knowledge and asset intensity in the electronics industries. In addition, the overall values of variance of factor (VIF) among variables in all regression models is 3.4, which is far from the cutoff value 10, suggesting the problematic multicollinearity is less concerned (Hair, Anderson, Tatham and Black, 1998).

**Hierarchical regression model**

According to Table 2, Model 1a provides the effects of control variables on firms’ R&D intensity. We can find that total assets have significantly negative relationship with risk taking; employee numbers have significantly positively relationship with risk taking. Debt ratio and ROA are significantly negatively related to risk taking. CEO duality has no significant effects on this study.
Table 2. Hierarchical Regression Models

<table>
<thead>
<tr>
<th></th>
<th>Model 1a</th>
<th>Model 1b</th>
<th>Model 1c</th>
<th>Model 1d</th>
<th>Model 1e</th>
<th>Model 1f</th>
<th>Model 1g</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln(total asset)</td>
<td>-0.310 **</td>
<td>-0.288 **</td>
<td>-0.286 **</td>
<td>-0.294 **</td>
<td>-0.292 **</td>
<td>-0.298 **</td>
<td>-0.295 **</td>
</tr>
<tr>
<td>ln(employees)</td>
<td>0.307 **</td>
<td>0.280 **</td>
<td>0.278 **</td>
<td>0.303 **</td>
<td>0.295 **</td>
<td>0.313 ***</td>
<td>0.305 **</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>-0.447 ***</td>
<td>-0.463 ***</td>
<td>-0.456 ***</td>
<td>-0.476 ***</td>
<td>-0.486 ***</td>
<td>-0.474 ***</td>
<td>-0.483 ***</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.130 *</td>
<td>-0.157 **</td>
<td>-0.146 *</td>
<td>-0.203 **</td>
<td>-0.202 **</td>
<td>-0.211 ***</td>
<td>-0.210 ***</td>
</tr>
<tr>
<td>CEO duality</td>
<td>0.021</td>
<td>0.043</td>
<td>0.045</td>
<td>0.045</td>
<td>0.045</td>
<td>0.048</td>
<td>0.047</td>
</tr>
<tr>
<td><strong>Primary Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family ownership (FO)</td>
<td>-0.103 *</td>
<td>-0.012</td>
<td>-0.113 *</td>
<td>-0.128 *</td>
<td>-0.106 *</td>
<td>-0.120 *</td>
<td></td>
</tr>
<tr>
<td>Family involvement (FI)</td>
<td>-0.264 ***</td>
<td>-0.442 ***</td>
<td>-0.224 ***</td>
<td>-0.226 ***</td>
<td>-0.206 ***</td>
<td>-0.209 ***</td>
<td></td>
</tr>
<tr>
<td>FO²</td>
<td>-0.105</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>FP²</td>
<td>0.185</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Outside directors (OD)</td>
<td>0.153</td>
<td>0.135</td>
<td>0.138</td>
<td>0.124</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FO x OD</td>
<td>0.112 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FI x OD</td>
<td>0.105 *</td>
<td>0.093 *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>15.655 ***</td>
<td>17.304 ***</td>
<td>13.637 ***</td>
<td>16.562 ***</td>
<td>15.514 ***</td>
<td>15.379 ***</td>
<td>14.424 ***</td>
</tr>
<tr>
<td>adj R²</td>
<td>0.190</td>
<td>0.268</td>
<td>0.267</td>
<td>0.285</td>
<td>0.295</td>
<td>0.293</td>
<td>0.301</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>ΔF for R² change</td>
<td>17.275</td>
<td>*** 0.859</td>
<td>8.423</td>
<td>** 5.265</td>
<td>* 4.421</td>
<td>* 4.391</td>
<td>*</td>
</tr>
</tbody>
</table>

Compared to Model 1b Model 1d Model 1d Model 1d

***p<0.001; **p<0.01; *p<0.05; p<0.1
In Model 1b we find family ownership and family involvement are negatively associated with risk taking, supporting H1a and H1b. The higher ratio of family ownership and family members in boards, the less firms risk taking. We further examine the potential nonlinear effects of family ownership and involvement. According to Model 1c, we find there are no nonlinear effects, marginally supporting our interaction effect are possible.

The effects of outside directors on risk taking can be observed in Model 1d, 1e and 1f. Model 1d shows that outside directors has a significant main effect on risk taking given the significant effects of family ownership and involvement. Model 1e and 1f show that outside directors have moderation effects on the relationship between risk taking and family ownership as well as family involvement respectively. H2a and H2b are supported. We find that outside directors not only have main effect on risk taking but also positively moderate the relationship between family ownership and risk taking as well as family involvement and risk taking. In Model 1g, we consider all variables and interaction variables at the same time. Although some effects become less significant, all expected signs do not change, suggesting the hierarchical regression models are robust.

**Comparison between two subgroups**

Table 3 shows the results of hierarchical regression model from 209 firms, group 1. These firms voluntarily set outside directors in their boards. Table 4 shows the results from 105 firms, group 1. Those firms are required to have at least two seats for outside directors. Comparing these two tables, outside directors still have main direct effects on risk taking no matter in which sub-samples. However, we cannot find any significant interaction effect in Table 4 but we can still find significant moderation effects in Table 3. That is outside directors cannot make influence on those family firms that involuntarily have the positions for outside directors. Oppositely, outside directors can still play an important role in those family firms that voluntarily introduce outside directors. These results support our H3a and H3b.
### TABLE 3. HIERARCHICAL REGRESSION MODELS (GROUP 1)

<table>
<thead>
<tr>
<th>n=209</th>
<th>Model 2a</th>
<th>Model 2b</th>
<th>Model 2c</th>
<th>Model 2d</th>
<th>Model 2e</th>
<th>Model 2f</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln(total asset)</td>
<td>-0.254 *</td>
<td>-0.240 *</td>
<td>-0.264 *</td>
<td>-0.250 *</td>
<td>-0.269 *</td>
<td>-0.258 *</td>
</tr>
<tr>
<td>ln(employees)</td>
<td>0.294 *</td>
<td>0.270 *</td>
<td>0.293 **</td>
<td>0.278 *</td>
<td>0.297 **</td>
<td>0.284 **</td>
</tr>
<tr>
<td>Debt ratio</td>
<td>-0.481 ***</td>
<td>-0.487 ***</td>
<td>-0.492 ***</td>
<td>-0.501 ***</td>
<td>-0.496 ***</td>
<td>-0.501 ***</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.205 **</td>
<td>-0.220 **</td>
<td>-0.251 **</td>
<td>-0.247 **</td>
<td>-0.274 ***</td>
<td>-0.265 ***</td>
</tr>
<tr>
<td>CEO duality</td>
<td>0.030</td>
<td>0.053</td>
<td>0.039</td>
<td>0.047</td>
<td>0.048</td>
<td>0.052</td>
</tr>
<tr>
<td><strong>Primary Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family ownership (FO)</td>
<td>-0.096</td>
<td>-0.097</td>
<td>-0.046</td>
<td>-0.102 +</td>
<td>-0.061</td>
<td></td>
</tr>
<tr>
<td>Family involvement (FI)</td>
<td>-0.293 ***</td>
<td>-0.242 ***</td>
<td>-0.251 ***</td>
<td>-0.162 *</td>
<td>-0.190 **</td>
<td></td>
</tr>
<tr>
<td>Outside directors (OD)</td>
<td>0.163 **</td>
<td>0.158 *</td>
<td>0.156 *</td>
<td>0.154 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FO x OD</td>
<td></td>
<td></td>
<td></td>
<td>0.150 *</td>
<td>0.116 +</td>
<td></td>
</tr>
<tr>
<td>FI x OD</td>
<td></td>
<td></td>
<td></td>
<td>0.161 *</td>
<td>0.120 +</td>
<td></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>10.323 ***</td>
<td>12.717 ***</td>
<td>12.304 ***</td>
<td>11.880 ***</td>
<td>11.791 ***</td>
<td>11.065 ***</td>
</tr>
<tr>
<td>adj R²</td>
<td>0.183</td>
<td>0.283</td>
<td>0.303</td>
<td>0.320</td>
<td>0.318</td>
<td>0.326</td>
</tr>
<tr>
<td>ΔF for R² change</td>
<td>15.114 ***</td>
<td>6.832 **</td>
<td>6.018 *</td>
<td>5.482 *</td>
<td>4.424 *</td>
<td></td>
</tr>
</tbody>
</table>
Compared to Model 2b  
Model 2c  
Model 2c  
Model 2c

***p<0.001; **p<0.01; *p<0.05; †p<0.1

| TABLE 4. HIERARCHICAL REGRESSION MODELS (GROUP 2) |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                  | Model 3a          | Model 3b          | Model 3c          | Model 3d          | Model 3e          | Model 3f          |
| n=105             |                  |                  |                  |                  |                  |                  |
| Control Variables | β                | β                | β                | β                | β                | β                |
| ln(total asset)   | -0.447 **        | -0.442 **        | -0.439 **        | -0.441 **        | -0.431 **        | -0.433 **        |
| ln(employees)     | 0.335 *          | 0.295 *          | 0.327 *          | 0.334 *          | 0.341 *          | 0.357 *          |
| Debt ratio        | -0.333 ***       | -0.364 ***       | -0.392 ***       | -0.398 ***       | -0.398 ***       | -0.410 ***       |
| ROA               | 0.083            | 0.054            | 0.011            | 0.007            | 0.001            | -0.008           |
| CEO duality       | 0.007            | 0.011            | 0.035            | 0.024            | 0.024            | 0.001            |
| Primary Variables |                  |                  |                  |                  |                  |                  |
| Family ownership (FO) | -0.053          | -0.096           | -0.136           | -0.091           | -0.167           |
| Family involvement (FI) | -0.218          | * -0.239 **     | -0.240 **        | -0.353 **        | -0.376 **        |
| Outside directors (OD) | 0.219           | * 0.208          | * 0.212          | * 0.190          |
| Interaction       |                  |                  |                  |                  |                  |                  |
| FO x OD           |                  |                  |                  |                  | 0.059            | 0.113            |
| FI x OD           |                  |                  |                  |                  | 0.169            | 0.200            |

76
<table>
<thead>
<tr>
<th></th>
<th>Model 3b</th>
<th>Model 3c</th>
<th>Model 3c</th>
<th>Model 3c</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>7.374</td>
<td>6.437</td>
<td>6.737</td>
<td>5.967</td>
</tr>
<tr>
<td>adj R²</td>
<td>0.236</td>
<td>0.270</td>
<td>0.308</td>
<td>0.303</td>
</tr>
<tr>
<td>ΔF for R² change</td>
<td>3.250 *</td>
<td>6.334 *</td>
<td>0.238</td>
<td>2.060</td>
</tr>
</tbody>
</table>

***p<0.001; **p<0.01; *p<0.05; p<0.1

Comparison with:

- Model 3b
- Model 3c
- Model 3c
- Model 3c
DISCUSSION

In this study, we examine the effects of corporate governance on Taiwanese family firms’ risk taking in electronics industries. We find that the more ownership the family has, the less risk the firms take. The same situation happens to the family business with high proportion of family members on the boards. Although outside directors can positively moderate the negative relationship, the effect only sustains when firms voluntarily introduce outside directors.

**Contribution**

This paper has three contributions. First, we empirically support Young et al.’s (2008) arguments that principal-principal conflicts exist in Taiwan and that traditional perspectives of agency theory are not applicable in emerging economies. The corporate governance contexts in emerging countries are distinct from Anglo-American settings (La Porta et al., 1999). The main potential problem of Taiwanese corporate governance is the asymmetry between majority shareholders (family ownership) and minority shareholders. The high deviation of family ownership and family board members make concentrated family shareholders dominate firms’ decision to abuse firms’ resources and appropriate the wealth of minority shareholders. The introduction of outside directors can reduce the conflict between these two asymmetric principals.

Second, despite the fact that we find that outside directors favor family firms’ risk taking, we argue that the effects of outside directors have limitation, especially in the institutional transition. Like South Korea in 1998, Taiwanese governance has required listed companies to set the positions for outside directors since 2002. We find that the compulsory requirements, however, do not favor firms’ risk taking. Standing on Peng’s (2004) findings, we present fine-grained findings that during the institutional transition firms have different levels of risk taking under the isomorphic pressures, given the presence of outside directors. We explain this effect partly because during institutional transition Taiwanese companies are less prepared to be such transparency and partly because Taiwanese companies are lack of connection with really professional outside directors. Both reasons make companies have no choice but to name someone familiar with business practices but outside the companies as outside directors. Such affiliated outside directors do not help the development of the firms, though they meet the legal requirement.

Third, this study shed some light on the family business. Unlike those findings based on Anglo-American settings, we find that family with high ownership involvement less risk-taking based on the sample of Taiwanese listed firms in electronics industry. We provide a contingent view
over the orientation of risk taking in family firms, arguing that the family firms’ orientation toward risk taking might be changed. We find that once family firms voluntarily introduce outside directors, their risk-taking orientation change from avoidance to preference. This effect demonstrates that family firms can intrinsically change their own attitude via professional supervision and suggestions from outsiders.

Some limitations in this paper should be mentioned. First, we choose electronics industries because one of the focal issues in this study is risk taking. Although companies in electronics industries might have more risk-taking behaviors, this limits the empirical generalization. Second, we choose data only from three years 2005-2007 because we would like to target the period of institutional transition. In such a way, we can differentiate the firms which introduce outside directors voluntarily from those under the isomorphic pressure (DiMaggio and Powell, 1983). Despite limitations, our study still has implications for practices and police makers. It cannot deny that the importance of outside directors in corporate governance. According to our findings, however, the affiliated outside directors cannot make an influence in family firms. Therefore, whether there is a machine for police makers to distinguish affiliated outside directors from professional outside directors is crucial for a better system of corporate governance. For the practitioners in family firms, the introduction of outside directors can revitalize family entrepreneurship. It is worthwhile to intrinsically import outside directors to help family absorb professional knowledge and leverage outside directors’ experience to foster network and build strategic links with other companies.

Conclusion
How corporate governance affects risk taking in family business is unclear, especially in the contexts of newly emerging economics. This study offers principal-principal logic to explain the opposite perspectives of family firms’ risk taking. In addition, by the chance of the reform in corporate governance in Taiwan, we examine the extent to which the reform can makes firms respond during the institutional transition. Data from Taiwan support our arguments that family ownership and involvement hamper firms to take risk and that only when firms voluntarily introduce outside directors, the outside directors can play their roles to make firms take risk.

Reference


56: 153-207.


737-783.


BRINGING INDUSTRY ANALYSIS ALIVE IN THE CLASSROOM: USING MICROSOFT EXCEL TO CREATE STRATEGIC GROUP MAPS

Michael E. Dobbs, Eastern Illinois University, medobbs@eiu.edu

ABSTRACT

Graphics engage audiences. Well designed data graphics engage audiences who might not otherwise care about a given subject (Tufte, 2001). Take college students. Lecture them about a topic and watch their eyes glaze over. Show them a picture that graphically displays that same topic and watch their eyes flicker instead. This interactive workshop demonstrates how Microsoft Excel can be used to easily create strategic group maps: a graphic commonly discussed in business courses, but seldom actually used. A program almost all faculty members have and are already familiar with can easily be used to create strategic group maps to activate student minds in new ways and on multiple cognitive levels.

DESCRIPTION OF WORKSHOP

Industry analysis is a component of several management disciplines, from strategic management to entrepreneurship to organization development & change and more. And one of the tools of industry analysis is strategic group mapping (Porter, 1980). The visual graphics, flexibility, and wide applicability make strategic group mapping a very effective teaching tool in the classroom, in small group exercises, and small group projects. In addition, as a learning tool, strategic group mapping can be used to achieve learning objectives associated with any or all of the cognitive development levels of Bloom’s taxonomy (Athanassiou, McNett & Harvey, 2003).

However, this potentially highly engaging tool is often overlooked as an instructional methodology. One reason this tool may be underutilized is because the creation of the graphics can seem daunting to some faculty members. While this may have been true in the past, the most ubiquitous spreadsheet program in the world (Microsoft Excel), available to nearly every business professor in North America, provides an option (3D bubble chart) for creating visually appealing and highly customizable strategic group maps in a relatively quick amount of time.

During the workshop, participants will watch as a strategic group map is created using precollected data. Participants with laptops will be able to follow along and create their own maps in real time. Additionally, the workshop presenter will provide an Excel spreadsheet file that can be used as a reference template to anyone interested. 45 minutes will provide enough time to expose participants to the basic techniques and allow participants to actually construct their own maps on laptop computers, experimenting with multiple configuration options.
The example used during the workshop will be a strategic group map of higher education institutions in the state of Illinois. This has proved a useful tool for use with students in the workshop presenter’s classes: the data are readily available from the U.S. News Web site, students have some familiarity with the industry, and students can easily relate to the information and implications of the map. These data are included in Table 1 and were used to construct an industry group map that is included as Figure 1 below.

**Table 1. Illinois Institutions of Higher Education**

<table>
<thead>
<tr>
<th>School</th>
<th>Accept Rate</th>
<th>Tuition</th>
<th>Enrollment</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Morris</td>
<td>82.6</td>
<td>19200</td>
<td>4590</td>
<td>B</td>
</tr>
<tr>
<td>McKendree</td>
<td>67.1</td>
<td>22070</td>
<td>3354</td>
<td>B</td>
</tr>
<tr>
<td>Greenville</td>
<td>79.4</td>
<td>20216</td>
<td>1618</td>
<td>B</td>
</tr>
<tr>
<td>Quincy</td>
<td>90.8</td>
<td>22030</td>
<td>1424</td>
<td>B</td>
</tr>
<tr>
<td>Judson</td>
<td>69.4</td>
<td>23500</td>
<td>1239</td>
<td>B</td>
</tr>
<tr>
<td>Blackburn</td>
<td>75.2</td>
<td>14286</td>
<td>636</td>
<td>B</td>
</tr>
<tr>
<td>Wheaton</td>
<td>61.8</td>
<td>26520</td>
<td>2915</td>
<td>L</td>
</tr>
<tr>
<td>Millikin</td>
<td>60.9</td>
<td>26345</td>
<td>2344</td>
<td>L</td>
</tr>
<tr>
<td>Illinois Wesleyan</td>
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<td>33982</td>
<td>2125</td>
<td>L</td>
</tr>
<tr>
<td>Lake Forest</td>
<td>59.1</td>
<td>34206</td>
<td>1400</td>
<td>L</td>
</tr>
<tr>
<td>Knox</td>
<td>65.6</td>
<td>31911</td>
<td>1382</td>
<td>L</td>
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<td>Monmouth</td>
<td>75.6</td>
<td>24950</td>
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<tr>
<td>Illinois College</td>
<td>66.9</td>
<td>21300</td>
<td>898</td>
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<td>SIU-Edwardsville</td>
<td>88.9</td>
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<td>13602</td>
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<td>Western Illinois</td>
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<td>Eastern Illinois</td>
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</table>
Strategic group maps can be used to identify competitors, identify mobility barriers, chart new strategic directions, predict competitor reactions, and generally identify threats and opportunities in an industry (Porter, 1980; Barney, 2007). Students can be directed to participate in these analytical exercises with much greater success using a tool like this rather than simply reading about an industry. And students are generally more engaged when asked to construct their own maps of an industry, either in class or as part of a group project. Strategic group mapping, then, is not only a useful aspect of industry analysis but is also an effective teaching tool. However, far too many faculty members are unaware of how easy it is to construct these maps and therefore fail to take advantage of this rich opportunity for increased student engagement. The goal of this workshop is to bring this information to other management instructors so they can be more effective in the classroom without spending an inordinate amount of time learning complicated graphics programs. After attending this workshop, anyone who is adept at using Microsoft Excel will be able to quickly construct a strategic group map.

REFERENCES


USING “WHAT IF . . . ? THEN WHAT?” FOR SCENARIO THINKING
Kathleen Margaret Wilbourn, University of St. Edwards, kathleew@stewards.edu

ABSTRACT

Scenarios are stories that describe the possible futures in which one must compete in five, ten, or twenty years. They force executives to consider how current realities might change in the future and thus affect the decisions made today. However, development of scenarios can be time and resource consuming, thus limiting their usefulness to organizations. This paper proposes using the scenario thinking technique of “What if . . . ? Then What?” as a strategic process by itself or as the entry point into developing scenarios. It improves decision making by identifying what actions will be beneficial or detrimental going forward, and what adjustments may need to be made as events unfold. Scenarios identify what data is crucial to the future success of an organization, and thus what trends must be tracked; “What if . . . ? Then What?” can provide the scenario thinking that is a key to developing scenarios.

Using “What if . . . ? Then What?” for Scenario Thinking

Scenarios are stories that describe the possible futures in which one must compete five, ten, or twenty years from now. They are based on the possible consequences of events as they occur in time. Scenarios force executives and managers to consider how current realities might change or mutate in the future and thus affect the goals set and the decisions made today. They uncover possible unintended consequences of chosen actions and identify the unconscious assumptions that underlie them. Scenarios allow people to test possible actions by playing them out in two or three different scenarios. This process then identifies what actions will be most beneficial or detrimental going forward, and what adjustments may need to be made as events unfold. In the midst of a continual onslaught of information and data, scenarios identify what information and trends are crucial to the future success of an organization, and thus what trends must be tracked.

Use of scenario planning rose following the 2001 attacks, to about 70% of executives surveyed by consultants Bain & Co. in 2002, up from 30% in 1999. Since then, Bain's surveys have found fewer executives using the tool, though the consulting firm expects heightened interest this year, because of the recession. “It's sort of like flood insurance,” says Michael Raynor, a corporate strategy expert at Deloitte Consulting LLP. “Everybody runs out and buys flood insurance the year after the flood.” (Tuna, 2009, para. 5).

A 2008 McKinsey Global survey revealed that business executives see scenario planning as an important strategy in succeeding in a global environment where information comes from all sides and where sudden changes in global forces can have catastrophic consequences. One only has to review the economic chaos of the past year to realize how
useful a scenario that detailed such a downturn would have been for individuals, individual companies, the governments, and global corporations. The negative scenario would have detailed the environment in which one would need to act, and have allowed consideration of possible decisions proactively instead of reactively. Having that scenario would have identified signposts that could have been tracked to see if the probability of certain events happening was increasing. Once a threshold was reached, a contingency plan could have been implemented. For individuals, the purchase of a house or car could have been delayed; for businesses, the new hires or new office space could have been delayed; for governments, different actions could have been analyzed; for global corporations, new ventures could have been halted. As it was, few people knew what to look for in the myriad of available data, and even when it became obvious that the economy was souring, few had a plan to implement to minimize its negative effects.

Unfortunately, that same McKinsey survey revealed that most executives did not act on any of the trends they thought might be important. When responders did act, the survey found that “few companies seem to be capturing all the opportunities or addressing all the risks presented by the trends on which they act” (“How Companies Act on Global Trends,” 2008, p. 5). If companies had had scenarios that identified forces that they knew directly affected their operations, they would have known what trends to track. This would have allowed risk management to have been based on data showing increased probabilities of events taking place. Scenario planning is an increasingly important arrow in the quiver of management strategies needed as the speed of change creates situations that have no precedent and are unpredictable.

One company, JDS Uniphase Corp, a company that designs and produces optical communication instruments, was ready for the downturn. It began scenario planning in 2004; each spring, executives consider three potential sales scenarios. In 2008, a worst case scenario allowed the company to be proactive in responding to what appeared to be an economic downturn. Revenue was up by midyear.

But Mr. Vellequette says he was concerned by salespeople saying customers had turned cautious. . . . More tangible signs of trouble emerged in the quarter ended Sept. 27, [2008] when JDS shipped more orders than it booked. . . . In October, the company announced it would kill some products, combine two of its four segments, shift more manufacturing to contractors, and shut three factories along with seven research-and-development sites, eliminating 400 jobs. . . . In the quarter ended Dec. 27, revenue fell for the first time in the downturn, by 11%, to $357 million. In January, the company said it would shut operations for one week each quarter, suspend its matching contribution to employee 401(k) plans and require senior managers to take extra unpaid days off. In February, JDS said it would sell a factory in China and shift more U.S. production to contract manufacturers. In all, the moves cut roughly one third of JDS’s 6,700 employees and reduced annual operating expenses by $120 million. The company continued to generate cash, despite a projected 15% decline in revenue in the fiscal year ended June 27. Mr. Vellequette says JDS executives are now using scenario planning to plot potential responses to a business upturn (Tuna, 2009, para. 9).
A REASON FOR THE INACTION

One reason that executives do not develop scenarios may be the complex process that is required to challenge assumptions, ask relevant questions, research data, develop possibilities, write the scenarios, and then instill in their managers the importance of using the scenarios as filters for decision making. Many of the books written on scenario planning detail complex steps that involve special teams, whose members serve two years on a scenario team and then return to regular positions in the organization. Developing full scenarios is a project itself, and it takes time and resources that many organizations do not have.

A scenario is a narrative about the future describing a coherent, plausible, and challenging picture of the confluence of patterns, environmental forces, and players. Scenarios have a value by creating a few distinctive patterns of the future that are likely to have substantively different effects on strategic decisions (Wells, 1998, p. 104).

Yet, scenario thinking and the results of making decisions through the filter of scenarios has proven beneficial for those organizations that do it. Scenarios as a strategy were first used for military planning after WWII. Military planners imagined what the enemy might be able to do in the future and planned contingencies to counter it. Hermann Kahn developed a model to think about the future as part of his work at RAND corporation in military strategy and was responsible for first using the word “scenario,” which was a Hollywood term for the script for a movie. (Lingren & Banhold, 2003) Today, the military’s scenarios are used to develop electronic simulations where planners are presented with a changing landscape and understand from making decisions in “real time” crises the value of being able to think through possible responses before they happen.

Royal/Dutch Shell has been the pioneer in scenario planning. “Shell’s success with the scenario planning approach also encouraged the majority of the Fortune 1000 companies to adopt scenarios in one way or another during the 1970s” (Lingren & Banhold, 2003, p. 37). The recession in the 1980s, however, stripped companies of the creative people involved in writing scenarios and traditional forecasting came back into vogue. The 1990s renewed interest in using scenarios as a means of coping with the rapidly changing global environment.

One such scenario was written about the feasibility of developing the Troll gas field in the North Sea in the early 1980s. Shell knew the platform would be tremendously expensive to build and operate, and Royal/Dutch Shell needed a high return on investment (ROI) to justify the cost. The scenario planning team saw that what happened in the USSR could be a factor in making a decision. The USSR has one of the world’s largest oil and gas reserves; but in the early 1980s the USSR was an enemy of the west and Europe was limited as to the amount of oil and gas it could purchase from the USSR; if that enemy status was maintained, Royal/Dutch Shell could sell its natural gas to Europe and meet its ROI requirements. However, the scenario team’s question was what would happen if the USSR moved away from its combative stance. Research uncovered that, because the USSR
had suffered a baby bust after WWII, there were insufficient workers to fill the positions in state-owned companies that were being vacated by retiring workers. Maintenance of infrastructure and plants was poor, and productivity was declining. The USSR economy might not be able to sustain itself going forward (Schwartz, 1991).

Research also uncovered that a man named Gorbachev was framing trade with the West as an extension, not a repudiation of the ideas of Stalin and Lenin. If the cold war ended, and European countries could buy more oil and gas from the USSR, Royal Dutch/Shell would probably not meet its ROI requirements. Royal Dutch/Shell tracked the trends; Gorbachev gained power, it postponed the development of the Troll gas field. But since the scenario had also proposed that Russia could only succeed if it formed partnerships with Western oil and gas companies to build new infrastructure, Royal/Dutch Shell tracked that trend also. When it did not happen, the company built its platform and made its profit. (Schwartz, 1991)

“WHAT IF. . . ? THEN WHAT?” AS A PRECURSOR TO DEVELOPING SCENARIOS

Obviously, as the Royal/Dutch Shell illustration shows, developing scenarios is a complex and resource consuming process. However, one can benefit from the scenario thinking that is the foundation of scenario planning by using the scenario thinking technique of “What if. . . ? Then What?” as an entry point into scenario planning. This can produce benefits even before any formal scenarios are written. Answering “What if. . . ? Then What?” can point to research that is necessary to verify the “What if. . . ? Then What?” that can then provide the foundation for thinking through what the organization might do if the “What if. . . ? Then What?” happened.

Royal/Dutch Shell’s first scenarios started with a “What if. . . ? Then What?” question 40 years ago. Pierre Wack was working for Royal Dutch Shell after the 1967 ArabIsraeli war. He and his planning team asked, “What if the price of oil destabilized?” The price of oil had been stable since the end of World War II, but the team realized that if the oil producing countries formed a consortium, they could control prices. Wack wrote a scenario describing in detail the energy crisis that would engulf the world if prices and production were thus controlled. It was a frightening enough scenario that the company developed a contingency plan that would move it from heavy fuels, which coal and nuclear power could replace to light fuels like gasoline, including investing in refining plants that could make lighter fuels. This led to tracking what was happening in those countries. The Organization of Petroleum Exporting Countries (OPEC) retaliated at the West for supporting Israel by consolidating its power over the oil market. The Yom Kippur War happened in fall of 1973, an oil shortage followed, and prices soared. Royal/Dutch Shell was prepared and moved from 7th to 3rd in global oil company rankings. (Schwartz, 1991).

Another example of “What if. . . ? Then What?” began in 1979 when James Burke, then chairman of Johnson & Johnson, asked his key executives to either commit to the J & J Credo, whose tenets were espoused by the company’s founder, or get rid of it. The Credo stated in part: Our first responsibility is to the doctors, nurses, hospitals, mothers,
and all others who use our products. . . . Our second responsibility is to those who work with us—the men and women in our plants and offices. . . . Our third responsibility is to our management. . . . Our fourth responsibility is to the communities in which we live. . . . Our fifth and last responsibility is to our stockholders (Collins & Porras, 1997, p. 59). The executives decided to keep the Credo, and a renewed emphasis was placed on communicating it throughout the company and using it for decision making.

In 1982 at a strategic planning retreat, Burke asked what J & J would do if there was a problem with one of its most profitable brands. His executives dismissed the question as worrying about things that would not happen, and no action was taken. Then, in September 1982, seven people died from taking Extra Strength Tylenol capsules that had been injected with cyanide. Although J & J had never written scenarios, and had not actually answered the “What if. . . ? Then What?” question, the executives had, in reality, contemplated the question because their boss had asked it, and, coupled with the recommitment to the Credo, they quickly made a decision to immediately remove all Tylenol capsules from the market at an estimated cost of $100 million, even though their legal department warned of possible lawsuits (Collins & Porras, 1997; Mitroff, 1998).

ANSWERING “WHAT IF. . . ? THEN WHAT”

Scenarios are developed backwards. With knowledge of the current environment and the organization’s future goals the writer decides what future state of the organization is important to contemplate and then describes that state in a year, 10 or 20 years in the future. Then, the scenario planning team asks, “How did we get here?” They start identifying the events and actions that would be required to get there, and what the probability of those happening in the future would be. This is the point at which research into key forces in the environment, the economy, society, and technology, to name a few, is required. However, one can use the research that has already been done by such scenario planners as Royal/Dutch Shell and futurist writers like Hammond (1998) and Lingren, M., & Bandold, H. (2003).

For example, Shell International Limited published Shell Global Scenarios to 2025. The Future Business Environment: Trends, Tradeoffs and Choices in 2005. It poses a “Trilemma: Triple Dilemma” by asking how (1) Efficiency, perceived as market incentives, (2) Security, perceived as coercion and regulation, and (3) Social Cohesion and Justice, perceived as the force of the community, would be resolved in a future globalized world. After investigating how the idea of the State has developed in the last three hundred years, they concluded that each one had been preeminent for a time. Each one alone would produce a utopia. They propose that three utopias can be perceived if only one has value: MarketCentric World, StateCentric World, and Civil SocietyCentric World. Since, in reality, globalization requires some measure of each, and it is impossible to have each as a true third, the scenarios are created around two up and one down.

Shell Global Scenarios to 2025 (Shell International Limited, 2005) proposes three major global scenarios in which a business may find itself in the 21st century. Low Trust
Globalization: Carrots and Sticks is based on Efficiency and Security. The state is responsible for providing security to its citizens and promulgates rules and regulations. Competition is regulated across country borders, and barriers to entry are high. Investors drive the economies and courts settle differences. It produces “A legalistic “prove it to me” world: A world of heightened globalization and more coercive states and regulators” (p. 11). Open Doors: Incentives and Bridges is based on Efficiency and Social Cohesion and Justice. In it, a high level of trust exists as good governance provides security for a civil society that values accountability for private and public sectors. Global business thrives. It produces “A pragmatic, “know me” world: A world of heightened globalization and more cohesive societies” (p. 11). Flags: Nations & Causes, is based on Social Cohesion and Justice and Security. In it, national security and sovereignty rule, as people wall themselves off from other cultures and countries. The citizenry value self-sufficiency and local communities, not global integration. It produces “A dogmatic, “follow me” world: A world in which values are affirmed in a more dogmatic, zero sum game manner, and in which states try to rally divided societies around the flag” (p. 11).

JDS Uniphase Corp bases its scenarios on a grid of “Sources of Leadership, Innovation and Change” and “Geopolitical and Social World” to come up with four global worlds in which to view its future: “Continental Drift” where regionalism is key in government, economy, and research and local competency is prized; “Proud Tower” where global corporations rule bring increased Internet security and corporate loyalty; “Frontier Friction” where trust in government wanes and fundamentalism and NGOs strengthen; and “Freelance Planet” where networks blur and collaboration produces innovation and opportunity (Tuna, 2009).

Thus organizations can start their “What if . . .? Then What?” by using those major scenario assumptions. Then the team members start asking “What if . . . ? Then What?” What if that event does not happen and another does? What if that event happens, but we are not in a position to respond that way? What if another event happens because of some global force changing in a way we don’t anticipate? To each “What if . . . ?” the team members then ask, “Then What?” We call this ‘tracking’, as it is a matter of tracking changes in the environment that may have an impact on the focal question. Tracking is about finding trends, drivers and uncertainties that need to be considered in the work, since they influence the future of the ‘question.’ (Lingren & Bandhold, 2003, p. 56).

SCENARIO THINKING PROCESS

“What if . . . ? Then What?” Scenario Thinking can be used as a strategic process by itself or a precursor to developing scenarios, since the information from the process is necessary to develop full scenario plans. Step 1: Driving Forces Analysis

The first step in this Scenario Thinking process is to analyze the driving forces that affect the organization. This could be done at the global level, country level, or regional level. The forces and their importance must be tied to the organization and to its
future. The global scenario structures by Shell and others can be used as a starting point.

Driving Forces Analysis

The Driving Forces Analysis allows the organization to understand what forces will be significant to moving forward in both positive and negative directions. The forces can then be researched to find out their current status and then described in terms of current and future importance. These become the first set of elements that must be tracked and any significant changes must be reported to management.

<table>
<thead>
<tr>
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<th>Element</th>
<th>Current Importance</th>
<th>Future Importance</th>
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<tr>
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<td>Resources</td>
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<td>Government</td>
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<tr>
<td>Society</td>
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<tr>
<td>Demographics</td>
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<td></td>
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<tr>
<td>Culture</td>
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<td>Education</td>
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<td></td>
<td></td>
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<tr>
<td>Technology</td>
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</table>

“What if...? Then What?” Analysis

The “What if...? Then What?” Analysis is based on the driving forces and strategic goals and plan.
An automobile company using the “What if...? Then What?” process could ask “What if someone creates a new type of battery or a substitute for batteries is created that will make electric cars inexpensive and easy to use? Then what?” Research would uncover Next Alternative Inc.’s new Carbon Nano Tube batteries (“Next Alternative Introduces Car Battery,” 2009) and EEStor (Dennis, 2009), a company that claims to have developed a revolutionary new type of capacitor for electricity storage, called Electrical Energy Storage Units (EESU) that would it propel a small car for about 300 miles, for starters. Tracking the success of each such venture and then tracking whether a success can be scaled would be essential. The “Then what?” question would be answered in terms of building an electric car and when. Other forces that would be tracked would be an increase in air pollution or new regulations on auto emissions, a new consumer interest in nongasoline engines because of global warming or the price of gasoline.

EXAMPLE: GENERAL MOTORS COMPANY

The following example of a Driving Forces Analysis and “What if...? Then What?” Map for General Motors Company assumes the current state is summer 2009. At this time the ownership of company common stock was: 60.8 percent, U.S. Department of the Treasury; 17.5 percent, UAW Retiree Medical Benefits Trust; 11.7 percent, Canada and Ontario governments; and 10 percent old GM Corporation. At a June 1, 2009 press conference, CEO Fritz Henderson announced that: This New GM will be built from the strongest parts of our business, including our best brands, and our very finest products. We will have far less debt, fully competitive labor costs, and the ability to generate sustained and positive bottom line performance. The New GM will have a significantly stronger and healthier balance sheet, which will allow us to better support our brands and products through investment, increase our investment in new technology, and be able to weather difficult times. . . . Today marks the beginning of what will be a new company, a New GM, dedicated to building the very best cars and trucks, highly fuel efficient, world class quality, green technology development, and with truly outstanding design. (p. 2).

Step 1: Driving Forces Analysis for General Motors Company

A FINAL NOTE

There are software programs that produce probability statistics on the data on which scenarios are based. Millet (2009) argues for an analytical scenario method using Bayesian probabilities because it forces people to examine their assumptions and biases, and to consider the negative scenarios with the same seriousness as the ones they wish to come true. Unfortunately, this is another technique for scenario planning that is time consuming and complex. The “What if...? Then” technique allows organizations to engage in scenario thinking which can then be a precursor to scenario planning.
<table>
<thead>
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<th>Future Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>Regulation on greenhouse gases and emissions</td>
<td>As stakeholder, government could dictate emissions U.S. desire to show world it is decreasing its own pollution</td>
<td>Other countries may push lower emissions</td>
</tr>
<tr>
<td></td>
<td>Incentives for electric cars</td>
<td>Cap and trade</td>
<td>Pay back</td>
</tr>
<tr>
<td>Society</td>
<td>Concern with environment Concern with fuel economy Concern with safety</td>
<td>Concern increasing for green alternatives Economic downturn means green too expensive</td>
<td>Bring down prices for green technology Partner with green companies Focus dealers on green buildings</td>
</tr>
<tr>
<td>Demographics</td>
<td>Age cohorts by decade Population bulge</td>
<td>No youth bulge for muscle cars Vehicles are kept for longer periods</td>
<td>Baby boomers buy small vehicles Smaller families do not need SUVs</td>
</tr>
<tr>
<td>Culture</td>
<td>Ownership Distances from family Status</td>
<td>Car coops in cities Public transportation Performance over status identification</td>
<td>Strategies to keep maintenance in dealerships Create GM maintenance partners Supplier to car coops</td>
</tr>
<tr>
<td>Education</td>
<td>Education level Literacy rate Need for specific disciplines or trades</td>
<td>Education leads to need for information Education leads to higher income Decline in engineering Decline in trade schools</td>
<td>Provide easy access to information on Website Scholarships for technology schools</td>
</tr>
<tr>
<td>Economy</td>
<td>Disposable income</td>
<td>Economic downturn Broaden network view</td>
<td>Engine importance Technology importance</td>
</tr>
<tr>
<td>Technology</td>
<td>Battery technology Alternative fuels Tracking devices availability for business</td>
<td>Innovation in battery technology slow No plug-in networks Alternative fuels expensive</td>
<td>Alteratives for batteries Plans alternative fuels Government requires tracking devices</td>
</tr>
<tr>
<td>Environment</td>
<td>Global warming Greenhouse gas emissions International vs. state regulations</td>
<td>Autos are source of greenhouse gas Oil prices are low and consumers not interested in expense of green cars</td>
<td>Global concern about pollution from auto emissions as more autos are bought in developing countries</td>
</tr>
<tr>
<td>Resources</td>
<td>Oil Natural gas</td>
<td>Oil prices low curtailing extraction</td>
<td>Increase in price could push electric cars and alternative fuels</td>
</tr>
</tbody>
</table>
Step 2: "What if . . . ?" Analysis for General Motors Company
REFERENCES


IMPACT OF ACADEMICIANS AS DIRECTORS
Guclu Atinc, Louisiana Tech University
Mark Kroll, Louisiana Tech University
Bruce Walters, Louisiana Tech University

ABSTRACT
We empirically test the potential impact of academicians as members of board directors using a 161 matched pair sample. Our results showed that presence of academicians as directors is positively associated with firm valuation and companies with such directors pay marginally higher to their directors. We did not observe any significance using accounting based measures although a negative association with ROE was observed which warrants further discussion. The practical implications of our findings are discussed and potential areas for future research are specified.

INTRODUCTION
Throughout the history of corporate governance studies, board composition and its impact on firm performance have been studied by various scholars (Walsh & Seward, 1990; Daily & Dalton, 1992). Although the results are not consistent (Dalton, Daily, Johnson, & Ellstrand, 1999), there is consensus among scholars that board composition can impact firm performance. Several theories such as Agency Theory (Jensen & Meckling, 1976), Institutional Theory (Scott, 1995), Resource Dependence Theory (Pfeffer & Salancik, 1978), Social Network Theory (Granovetter, 1985) and even Stewardship Theory (Donaldson & Davis, 1991) acknowledge the importance of monitoring practices on firm outcomes in one way or the other. In this study, we seek to investigate the impact of one specific type of directors on firm outcomes. To our knowledge, academicians as members of boards of directors have never been analyzed in detail with regard to their impact on board outcomes. Considering the job security they often enjoy owing to tenure and the expert knowledge they possess in their fields, academicians may be both willing and able to provide valuable knowledge to the firms whose boards they serve and serve as effective monitor. It may be, they are more likely to act as truly independent directors (Daily, Dalton, & Rajagopalan, 2003) and satisfy Agency Theory’s mandates (Jensen & Meckling, 1976) concerning vigorous outside monitoring. Fama and Jensen (1983) observe that directors derive their power to monitor executives from shareholders and thus should use that power for the benefit of those shareholders. As appointed directors, professors may also have impact on performance through the knowledge resource they provide based on Resource Dependence Theory as well (Pfeffer & Salancik, 1978). Further theoretical support can also originate from Institutional Theory (Scott, 1995) as professors being symbols of legitimacy in the eyes of external environment based on their potential to add credibility to
firms’ decision making processes. It is our purpose in this study to investigate if such an impact exists and if it is beneficial for firms to have PhDs on the board.

CONCEPTUAL DEVELOPMENT

In corporate governance literature, directors are broadly categorized as insiders, who hold executive positions in the focal firm, and outsiders who do not (Wright, Kroll, & Elenkov, 2002; Walters, Kroll, & Wright, 2008). Additionally researchers also consider affiliated outside directors or gray directors who are considered to have some kind of past, present or future relationship with the focal firm’s executives (Ryan & Wiggins, 2004). The most often studied group of directors are the outsiders as the impact of them monitoring and advice-giving are common factors in several theories. Outsiders play important roles in organization practices and provide various inputs to the executives (Lynall, Golden, & Hillman, 2003). We are not moving away from that contention in this study. Actually, one of the assumptions we make at the beginning of this study is that academicians who are members of a board of directors are likely to be truly independent outside directors, not executives or gray directors. Without that assumption, the applicability of select theories may not be logical and appropriate.

Hillman, Canella, & Paetzold (2000) distinguish between the three types of outside directors. Business experts are executives and directors of other companies, community influencers are those that have the capacity to provide companies with knowledge of their immediate outside environment (Kroll, Walters, & Le, 2007). The third type, support specialists, lack general management experience but do possess expertise in specialized areas such as law or public relations. Academicians can be considered as support specialists. Most academicians are not executives in other companies so they lack managerial experience. In fact, most universities do not allow their tenured professors to have full time jobs somewhere else, although they may serve as consultants or directors. In addition, academicians are experts in their fields which means their presence is very valuable to the companies. Also, due to their known expertise, lots of academicians serve on other company’s board of directors as well, which sets them as important factors of social capital (Coleman, 1988).

Outside directors are thought to be vigilant in performing their duties (Fama, 1980). Thus, investigating the relationship between academicians’ presence and board vigilance makes intuitive sense. If majority of directors in a board are independent than those boards are considered to be vigilant (Kroll, Wright, & Elenkov, 2002). Companies who are eager to appoint academicians as their directors are probably the ones more sensitive to presence of vigilance. Logically, if the shareholders, especially the ones with considerable voting power, are not concerned with vigilance and rely primarily on their executives to do the right things, they will not be concerned with who serves on the board either. Directors drive their power from the
shareholders (Fama & Jensen, 1983) and are appointed as agents to protect shareholder interests. We previously classified academician directors as support specialists. Firms with support specialists on their boards are likely to have other two types of outside directors as well because by their definition the combination of these three types of directors by provide more promising outcomes for the company. In short, these types of boards are more likely to have outsider dominance. In a way, these types of companies will be more sensitive to the requirement of independence as a success factor and thus will have more vigilant boards. Building on this discussion, we begin by proposing our first hypothesis:

Hypothesis 1: Companies with academicians on their boards are likely to have more board vigilance comparing to ones without academicians on their boards.

It takes over 10 years of higher education to become an academician, not to mention the need to spend countless years on research. It takes even longer to become recognized as an authority and gain appointment as a director. Majority of the academicians in our sample are professors at prestigious schools. These schools serve as the pioneers in their fields and conduct much of the research that shapes today’s business environment. Organizations that build institutional linkages to well-established institutions will signal adherence to norms (Baum & Oliver, 1991) and thus will enjoy enhanced legitimacy (Oliver, 1990). In that way, organizations with academicians on their boards should enjoy greater legitimacy. Based on Institutional Theory (Scott, 1995), the organizations with academicians on their boards should be recognized as more valuable in the eyes of the public. We should note that there is a difference between valuation of the firm in the eyes of the public and valuation based on actual firm performance shown on the accounting books. Although, naturally these two things are strongly correlated, the distinction lies in the difference between perceptions of market participants and actual results. For instance, market valuation represents the market’s consensus concerning the value of the company. According to Institutional Theory, there should be a positive signaling effect (Baker & Edelman, 1992) on values of the companies with academicians on their boards. Additional theoretical basis can also be found in embeddedness of social relations of which academicians are a part of according to Social Network Theory (Granovetter, 1985) should create value. Considering the affiliations of professors of prestigious schools, who are likely to serve on other companies’ boards or at least serve as consultants to other institutions, professors are likely to create value. Their social networks with members of the business environment should also serve as a source of value for firms. Market mechanisms tend to react to governance changes companies make. If a highly regarded academician is appointed to a company’s board, then market participants might recognize that addition to have a positive impact on firm outcomes. Building on this discussion our second hypothesis is:
Hypothesis 2: Companies with academicians on their boards will be perceived as being more valuable by the market.

On top of the previous hypothesis regarding market valuation, academician presence on the board may have positive impact on firm performance as well. Influenced by the finance field, corporate governance researchers make a distinction between market-based indicators and accounting-based indicators (Wright P., Kroll, Lado, & Elenkov, 2005). Accounting based indicators, like Return on Assets (ROA) and Return on Equity (ROE) are the solid number type of indicators which reflect how much profit the company is generating. Agency Theory may be more applicable to assess accounting based performance measures. Agency Theory relies on the need for independence for better monitoring practices when the agent and principal have conflict of interests (Jensen & Meckling, 1976; Eisenhardt, 1989). Based on Agency Theory, if the agents are better monitored due to independence, then the outcomes will be better (Fama & Jensen, 1983). In our first hypothesis, we already specified boards with academician directors to be more vigilant. That vigilance should be reflected in actual firm performance based on accounting measures. Once again, the previous hypothesis was about market perception while this hypothesis is how the numbers reflect the potential positive impact of board vigilance. We believe academicians to be effective monitors. We also believe that they will provide their companies with valuable inputs. This is where Resource Dependence Theory (Pffeffer & Salancik, 1978) comes into play. According to this theory, organizations need valuable resources from the external environment in order to survive. Academicians, with their expert knowledge, can be considered as sources of these valuable resources. Building on the propositions of both of these theories, we propose the following third hypothesis:

Hypothesis 3: Presence of academicians as members of the board of directors will have positive impact on firm performance.

Finally, if academicians are proposed to be beneficial to firm outcomes both in terms of market value and actual performance then due to their potential benefits it should be more costly to appoint them in terms of director compensation. Following Sarbanes Oxley Act of 2002 (SOX), the responsibilities of the directors are better outlined. Because of SOX, directors have personal liability (Certo, Catherine, Dalton, & Lester, 2008) for fraudulent activities, even if they are not directly involved in their commission. Due to harsh legal consequences, directors, particularly outsiders, are reluctant to accept directorship positions. As a consequence, companies are beginning to consider director compensation as a significant expense item. More structured compensation schemas are needed for directors in order to motivate them to serve their purpose (Hamdani & Kraakman, 2007). An academician, holding a tenured professorship in a prestigious school, is already likely to enjoy a substantial amount of income. More importantly, he/she does not feel any real threat to his or her job security. It is probably harder to convince
such a person to take the burden of legal liabilities of serving on a public company’s board. In summary, we are proposing the director compensation in firms with academicians serving on the board to be higher comparing to other types of directors. Once again, if academicians are likely to bring in vigilance, better value and better performance based on the previously mentioned theories’ contentions, there should some cost associated with their presence. This discussion is summarized in the following hypothesis:

**Hypothesis 4:** Companies with academicians on their boards have higher average director compensation.

**METHODS**

**Sample Creation**

We used *The Corporate Library* to gather the directors’ information. This database includes information on executives and directors of the majority of the publicly traded firms. First the names of all the publicly traded companies in 2003 with directors’ information are gathered in spreadsheet format. Using Microsoft Excel’s filtration procedure, companies with directors’ suffix as “Ph.D, Dr, DBA, Prof, or other modified versions of doctoral education related suffix” were identified. Then, the filtration was further used to identify the directors with reported addresses as universities were screened out. The sample size was 338 after all filtration. Financial services companies were eliminated due to different types of regulations for that sector (Schnatterly, 2003). Finally companies with active CEO academicians and affiliated outside academicians were eliminated. Some companies were also eliminated due to missing or corrupt data. The final number of companies with academicians on the board was reduced to 161. The following steps were used to create a matched pair sample:

- Using Compustat North America, primary SIC codes of the above mentioned 161 companies were identified
- From Compustat, all firms with corresponding SIC codes were identified and their total asset figures were collected for 2003
- The original list of 161 companies were sorted based on the SIC code and then the total asset values
- Using Microsoft Excel’s *match* and *index* commands, the companies closest to each of the 161 company were identified (either 1 or 2 row below or above the focal company)

In this way, the original 161 companies were matched with 161 other companies.
Variables

Dependent Variables: Several dependent variables were used in different models. First, in order to account for vigilance in Hypothesis 1, percentages of outside directors were calculated by dividing the total number of outside directors by the total number of directors. Only directors who have no affiliation with the company other than serving on the board are considered as independent outside directors (Kroll et al., 2002). Outside related or so called gray directors (Ryan & Wiggins, 2004) were eliminated. Corporate Library’s Directors Database identifies directors as affiliated or not and we used their designation. Vigilance data was collected for year 2003 since the original companies were identified using 2003 data. Second, two of the accounting based indicators; Return on Assets (ROA) and Return on Equity (ROE) were used to assess performance measures mentioned in Hypothesis 3. This time, in order to see the effect of academicians clearly, lag data from 2004 and 2005 was used (the original data was from 2003). For each company, ROA was calculated as net income divided by total assets and ROE was calculated as net income divided by stockholder’s equity (Wright & Kroll, 2002). This accounting data were gathered using Compustat North American Database. Third, market value for the fiscal year was gathered as designated by Compustat database. This variable was used to operationalize the response variable mentioned in Hypothesis 2. The log transformation is used to normalize the market value data. For Hypothesis 4, we used the log of directors’ base pay variable from Director’s Database.

Independent Variables: The main predictor variable in our models was the binary variable created to account for presence of academicians as members of board of directors. This variable was coded as 1 if the focal company had at least one academician on the board and 0 for the matched pair companies.

Control Variables

Firm Size: Although the prior research has provided inconsistent results concerning the relationship between firm size and firm performance relationship (Gooding & Wager, 1985) the addition of a firm size variable in a regression equation with firm performance as the dependent variable makes intuitive sense (Kim, Hoskisson, & Wan, 2004). Since one of the performance variables, ROA, is calculated by dividing net income by total assets, we chose not to use total assets to operationalize firm size. Instead we chose to use number of employees to operationalize that variable (Uzzi & Gillispie, 2002). In order to normalize the data we used the log of number of employees (Capar & Kotabe, 2003).

Industry: Using the first two digits of the SIC codes we assigned a specific number to each industry and used that variable to account for industry effects (Westphal & Frerickson, 2001).
Firm Performance: Although firm performance is the dependent variable to test Hypothesis 3, it is also used as a control variable in the model constructed to test Hypothesis 2 because firm performance is known to be related with market value (Huselid, Jackson, & Schuler, 1997). ROA is the variable used to operationalize firm performance.

**Analytical Models**

Multiple regression was used to test the following models:

**Model 1 (Firm Performance):**
\[
\text{ROA/ROE} = \beta_0 + \beta_1 \text{Industry} + \beta_2 \log \text{Employees} + \beta_3 \text{Presence of Academicians on the board} + \epsilon
\]

**Model 2 (Market value):**
\[
\log \text{Market value} = \beta_0 + \beta_1 \text{Industry} + \beta_2 \log \text{Employees} + \beta_3 \text{ROA} + \beta_3 \text{Presence of Academicians on the board} + \epsilon
\]

ANOVA is used to investigate the difference between companies with academicians on the board and those with not with regard to vigilance and director’s base pay. We consider ANOVA to be a sufficient tool to demonstrate differences based on these two variables.

**RESULTS**

First of all, missing data was a great problem for directors’ base pay variable. Due to that reason ANOVA was conducted on only 75 pairs. We checked the SIC codes of the remaining companies and did not recognize any one industry to dominate the sample after this elimination. Since ANOVA is conducted on mean values, the sample size of 75 matched pairs should be sufficient.

Pearson correlations and descriptive statistics of the variables used in Model 1 and 2 are provided in Table 1.
TABLE 1

Descriptive statistics and Pearson’s Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means</th>
<th>s. d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Presence of Academicians</td>
<td>.500</td>
<td>.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Log of Employees</td>
<td>.686</td>
<td>.719</td>
<td>.111**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ROA</td>
<td>.022</td>
<td>.159</td>
<td>.001</td>
<td>.411**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ROE</td>
<td>.048</td>
<td>.397</td>
<td>-.072</td>
<td>.345**</td>
<td>.772**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Log of Market Value</td>
<td>3.248</td>
<td>.812</td>
<td>.177**</td>
<td>.588**</td>
<td>.429**</td>
<td>.372**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Industry</td>
<td>21.28</td>
<td>10.79</td>
<td>-.006</td>
<td>.193**</td>
<td>.096*</td>
<td>.059</td>
<td>-.01</td>
<td></td>
</tr>
</tbody>
</table>

N= 618. * p<.05; **p<.01; ***p<.001

Table 2 contains the results of the regression models. In Model 1, academicians binary variable is significantly related with ROE (p<0.01) but in a negative direction unlike what was originally hypothesized. The same variable did not come out to be significantly related with ROA although the direction was still negative. This means there is no support found for Hypothesis 3 although we believe the direction and the partial significance observed is meaningful. We will try to discuss the potential importance of this finding further in the discussion section. In Model 2, the same binary variable came out to be significantly (p<0.01) related with the market value. This time the sign of the coefficient is in the hypothesized direction so there is strong support for Hypothesis 2.

Table 3 contains the ANOVA results of the comparison of the two groups of companies with regard to director’s base pay and vigilance. The percentage of outside directors did not come out to significantly different between the two groups although the mean values reported in Table 4 shows slightly higher percentages for the companies with academicians on their boards. This means Hypothesis 1 is not supported. Hypothesis 4 is supported but the significance value is marginal (p<.10). The mean value of director’s base pay was lower for companies with no academicians on their boards.
In summary, Hypothesis 2 is strongly supported and Hypothesis 4 is marginally supported. Hypothesis 1 and Hypothesis 3 are not supported although statistical significance was observed for ROE in Model 1. The importance of these findings will be further discussed in the following section.

<table>
<thead>
<tr>
<th>TABLE 2-Regression Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>ROE</th>
<th>Log of Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of Employees</td>
<td>.416***</td>
<td>.360***</td>
<td>.504***</td>
</tr>
<tr>
<td>Industry</td>
<td>.006</td>
<td>-.017</td>
<td>-.102***</td>
</tr>
<tr>
<td>Presence of Academicians on the Board</td>
<td>-.057</td>
<td>-.110***</td>
<td>.137***</td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td></td>
<td>.216***</td>
</tr>
<tr>
<td>Model F Statistic</td>
<td>41.463***</td>
<td>28.805***</td>
<td>104.133</td>
</tr>
<tr>
<td>Model R²</td>
<td>.172</td>
<td>.131</td>
<td>.41</td>
</tr>
</tbody>
</table>

N= 603. †p<.10; * p<.05; **p<.01; ***p<.001. All of the VIF values in the above models are less than 10.

Table 3 -ANOVA Results of Comparison of Companies with Academicians on the board or not

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of Director’s Base Pay</td>
<td>Between Groups</td>
<td>6.413</td>
<td>1</td>
<td>.000</td>
<td>3.041†</td>
</tr>
<tr>
<td></td>
<td>Within Groups Total</td>
<td>6.563</td>
<td>130</td>
<td>.049</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>131</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

108
Percentage of Outside Directors Between Groups Within Groups Total
0.002 3.508 3.511
1 1 142 143
0.002 0.98

Table 4 - Descriptives of variables used in ANOVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of Director’s Base Pay</td>
<td>0</td>
<td>64</td>
<td>4.399</td>
<td>.226</td>
<td>4.778</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>68</td>
<td>4.467</td>
<td>.218</td>
<td>4.954</td>
</tr>
<tr>
<td>Percentage of Outside Directors</td>
<td>0</td>
<td>72</td>
<td>.688</td>
<td>.147</td>
<td>.920</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>72</td>
<td>.696</td>
<td>.166</td>
<td>.910</td>
</tr>
</tbody>
</table>

Note. †p<.10; * p<.05; **p<.01; ***p<.001

DISCUSSION

We contended that companies with academicians on the board will have more vigilant boards, will perform better based on accounting measures, will be perceived as more valuable by the investment community and due to these potential positive outcomes will spend more money on their directors. Based on the above results we observed higher perceived value and marginally higher director’s base pay. We also observed a significant relationship between one of the accounting measures (ROE) but not in the hypothesized direction. If these companies are perceived as more valuable, why is it not reflected in the accounting based numbers? We believe this question warrants further examination.

Ayadi, Dufrene, & Obi’s (1996) study maybe be helpful in explaining this inconsistency. In that study, the authors propose that accounting based measures such as ROE or Return on Sales (ROS) may be handicapped by the fact that they reflect historical trends and not the others’ perceptions about the company. They further mention a more reliable measure of performance should involve the riskiness of the firm. Market value is a measure of market’s perception about the riskiness of the company. What we found here fits with Ayadi et al.’s contentions. Also, there might be some difference in the accounting standards of our sample companies. Although not illegal, some companies may choose to implement more relaxed accounting standards on the valuation of their assets, particularly depreciation which would shift income upwards. Companies with academicians may implement more strict accounting principles which would have relatively detrimental effects on accounting numbers in the short run although in the long
run it may be more beneficial. Ball (2006) highlights the importance of transparency in accounting standards in order for the boards to make more effective monitoring. Managers not monitored properly about their financial actions will ultimately have detrimental impact on firm value (Jensen, 1986). Full financial disclosures can be used to solve the agency conflicts contended by Agency Theory (Bushman & Smith, 2001; Hope & Thomas, 2008). In short, we believe the presence of academicians may be correlated with more strict, long-term shareholder value creation oriented financial measurement techniques employed by the companies. We further believe that, market is aware of the positive externalities associated with their presence and value the companies accordingly. That is probably why we found a positive association with the firm value but negative relationship with one of the accounting measures. Once again, academicians bring in expert knowledge and do better jobs as monitors which is reflected in the firm value in our case.

The reason we did not observe variance for vigilance can be attributed to the requirements of Sarbanes Oxley Act (2002). According to this act, firms are required have outside director majority in their boards. Although there might be differences between the legal outside definition and practical activities of those outsiders, we are stuck with what is reported in the annual proxy statements. In other words, based on the data gathered from the database, which reflects information from the proxy statements, companies did not differ in terms of vigilance when the percentage of outsiders was used as the vigilance measure. Since the monitoring capabilities and expert knowledge of the outsiders is extremely hard to identify for each company and beyond the scope of this study, we do not investigate this vigilance issue in more detail. Further studies should address this dilemma.

Finally, a marginally significant difference was observed for director’s base pay. We previously mentioned the liability and legality issues concerning being a director of a publicly traded company. Academicians, with job security due to their tenured professorships, may be more reluctant to become board members unless companies are willing to pay them more. In our dataset, we observed this difference. However, due to marginal significance level (p<0.10), we are not confident with this finding. Further investigation about the compensation schemas of directors for these companies may be more explanatory. We do not have access to that data at the moment and consider to be a potential future area to be investigated.

This study has implications for both the academicians and professionals. First of all, professionals should consider the benefits of appointing academicians as directors. Ultimately, shareholders seek to maximize their investment return. A higher market value and corresponding accounting based performance is the ultimate aim for the shareholders. In our case, we observed the higher market value although not the corresponding accounting measures. We explained our reasoning for this finding and assume that market value is the real reflection of investment
returns by the shareholders. To our knowledge, no previous study investigated the impact of academicians on the board. Business scholars should start paying attention to academicians’ presence as the members of the board of directors. After all, universities are the main drivers of research for better business practices. Further investigation, particularly interviews with the shareholders and executives of the companies with academicians, should provide more insight about this issue.

LIMITATIONS

Our study has several limitations. First of all, one might criticize the potential effect firm size variable on the results. Although we might agree with that criticism, our sample creation technique of matched-pair design should have acted as insulation for the effects of firm size. We constructed our matched-pair sample using total asset ranking so the direction between firm size and presence of academicians should be one way (firm size as an antecedent). In other words, larger firms may be more willing to appoint academicians on their boards and those may be the ones perceived as more valuable although accounting based measures do not reflect the performance side. We believe more advanced path analysis techniques may illustrate the ongoing relations in more explanatory ways. Future studies may consider that. Second, we had to decrease the sample size to almost half for ANOVA due to missing data. Future studies should investigate the vigilance and director’s base pay issues with a larger sample size using more companies with less missing data. Third, we did not consider the specific background information of the academicians. Although majority of the academicians in our data set were from prestigious business schools such as Harvard, Stanford or Princeton, time limitations hindered us from investigating the background information about each director. Once again, that is an area to be investigated by future researchers.

CONCLUSION

In this study we aimed to investigate a specific type of support specialists (Hillman et al. 2000). Academicians have expert knowledge in a specific area although they can be considered to lack sufficient professional experience. Our results show that there is some impact of academicians on firm market value. Our results also show that the accounting based measures do not reflect the perceived value of the market. In short, their presence seem to have positive signaling effect on the market. Just for that very reason, companies should seriously consider appointing more academicians on their boards. After all, they serve as symbols of legitimization based on Institutional Theory (Scott, 1995). With regard to accounting data, we believe the reflection will happen in the long run due to better monitoring practices contended by Agency Theory (Jensen & Meckling, 1976), and attributed to expert knowledge as a valuable resource based on Resource Dependency Theory (Pfeffer & Salancik, 1978). Further investigations of the
impact of their presence may produce better results but for the time being it may be considered safe to say that academicians are perfect independent outside directors who are likely to have some positive impact on the firm outcomes.

REFERENCES


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DETERMINING ENTREPRENEURIAL SPIRIT: AN EXAMINATION OF PROTESTANT WORK ETHIC BELIEFS

Kimberly Johnson, Auburn University, kjohns36@aum.edu

ABSTRACT

For decades, researchers have attempted to determine what causes an individual to engage in entrepreneurial activities. Instead of creating an entrepreneurial profile, this study advocates entrepreneurial spirit, which is a predisposition towards entrepreneurship. In determining entrepreneurial spirit, this study will specifically examine if the endorsement of Protestant Work Ethic (PWE) beliefs influences entrepreneurial spirit. This study will attempt to demonstrate how the endorsement of PWE beliefs relates to entrepreneurial spirit and how the possession of an entrepreneurial spirit may result in business venture formation.

The results of a regression analysis revealed that entrepreneurial spirit is related to PWE beliefs. Contrary to expectations, a significant relationship between entrepreneurial spirit and venture formation was not found. Limitations and suggestions for future research are discussed in the paper.

DETERMINING ENTREPRENEURIAL SPIRIT: AN EXAMINATION OF PROTESTANT WORK ETHIC BELIEFS

For decades, researchers have tried to identify what causes an individual to become an entrepreneur. For example, researchers have studied entrepreneurs’ traits (Bonnell & Furnham, 1991; Carland, Carland, & Aby, 1989; Littunen, 2000; Reynierse, Ackerman, Fink, & Harker, 2000), backgrounds (Hirsch, 1990), and the influence of parental education (Hirsch & Brush, 1983; Rhodes & Butler, 2004) and occupation (Hirsch, 1990). However, despite the enormity of literature, there is still some disagreement about what constitutes an entrepreneurial profile.

Some researchers believe the development of an entrepreneurial profile is futile. Specifically, Hirsch (1990) argues that a typical entrepreneurial profile is non-existent. Hirsch posits that entrepreneurs can emerge from a multitude of familial, racial, ethnic, educational, and work backgrounds. On the other hand, Bird (1989) asserts that entrepreneurs come from a given social, economic, and family situation.

Instead of creating an entrepreneurial profile, this study advocates entrepreneurial spirit, which inclines an individual to have an entrepreneurial mindset and tendencies. Persons with
entrepreneurial spirit have characteristics similar to entrepreneurs such as lots of energy, acceptance of change, developing new opportunities, and approaching tasks in a unique way. This concept of entrepreneurial spirit is used to help answer the question of what factors incline an individual to have an entrepreneurial mindset and tendencies.

Unlike the concept of entrepreneurial spirit, an entrepreneurial profile implies that only those persons who possess specific entrepreneurial characteristics will engage in entrepreneurial activities. However, possessing an entrepreneurial spirit suggests that certain people are more inclined to possess characteristics common to entrepreneurs. For example, individuals with an entrepreneurial spirit are more open to change, have high energy, and prefer non-routine approaches to business practices.

In addressing the idea of entrepreneurial spirit, this study will focus on socialization, an area referenced in the literature that influences entrepreneurs (Kisfalvi, 2002). Specifically, Protestant Work Ethic (PWE) beliefs will be examined. PWE beliefs are included in this study for two reasons. First, studies have shown that childhood experiences influence an individual’s PWE beliefs (Kisfalvi, 2002; McClelland, 1961). For example, research has indicated that various components of PWE - specifically need for achievement (McClelland, 1961) and locus of control (Crandall & Katovsky, 1965) - are developed through early childhood socialization. Based on this and similar research, PWE beliefs are considered to be developed through socialization. Therefore, this study will empirically test whether a relationship exits between entrepreneurial spirit and the endorsement of PWE beliefs.

Although demographic characteristics are also believed to impact whether an individual will become an entrepreneur (Lau, 1994), only two demographic variables will be examined in this study. The majority of research on an entrepreneur’s demographic characteristics has produced inconsistent findings (Lau, 1994) with the exception of educational attainment (Brockhaus & Horwitz, 1986; Cooper & Dunkelberg, 1987) and gender (Baker, Aldrich, & Liou, 1997; Menzies, Diochon, & Gasse, 2004). As a result, the second portion of this study will examine if educational attainment and gender influence the transition from entrepreneurial spirit to business venture development.

Previous research on entrepreneurs has not resulted in an explanation as to what type of individual engages in entrepreneurial activities. This study will attempt to demonstrate how PWE beliefs relates to entrepreneurial spirit. Next, this study will analyze if possessing an entrepreneurial spirit results in business venture formation.
In addition to contributing to the research on entrepreneurs, this study also contributes to entrepreneurship theory, more broadly. This study attempts to establish the importance of differentiating between an entrepreneurial profile and possessing an entrepreneurial spirit.

*Entrepreneurship*

Originating from the French word “entre prende,” entrepreneur means one who bears responsibility (Moen, Rahman, Salleh, & Ibrahim, 2004). The ambiguity of the phrase “bearing responsibility” may be a factor in the varying definitions of an entrepreneur. As such, little agreement exists among those definitions utilized by researchers to describe entrepreneurs (Gartner, 1988). This inconsistency has been problematic in the development of a specific entrepreneurial profile.

The many definitions of “entrepreneur” are too numerous to include in this paper. However, several definitions are cited to demonstrate the variation in the literature. Entrepreneurs have been defined as innovators or opportunists (Gibb, 1987); individuals who search for and are receptive to change (Drucker, 1985); and people who expand businesses, create potential new employment, and assist in economic growth (Thomas & Mueller, 2000). On the other hand, other researchers posit a “traditional” view of entrepreneurs. Defining entrepreneurs as individuals who establish businesses (Soslow, 1966) that they personally own and control (Bonnett & Furnham, 1991).

To complicate the discussion on entrepreneurs, it should be mentioned that “hybrid” forms exist. For example, similar to entrepreneurs, intrapreneurs are corporate employees who oversee innovative projects within the confines of an organizational setting (Jennings, 1994; Miller & Friesen, 1982; Slevin & Covin, 1990). Intrapreneurs can be viewed as entrepreneurs working within an already existing organization (Hisrich, 1990).

Despite the inconsistency among definitions of entrepreneur, numerous studies suggest entrepreneurs differ from non-entrepreneurs (Carland & Carland, 1992; Ginn & Sexton, 1990; 1988; Reynierse et al., 2000). Generally, researchers agree that entrepreneurs possess specific attributes, such as need for achievement, internal locus of control, belief in hard work, satisfaction with delayed gratification, and moderate risk propensity (Gartner, 1985; Gibb, 1987; McCarthy, 2002; Sexton & Bowman-Upton, 1990; Timmons, 1990; Utsch, Rauch, Rothfuss, & Frese, 1999). Several of the attributes can also be categorized as socialization factors.

*Socialization Factors*
As part of a study on the effect of role model performance on the development of an entrepreneurial career preference, Scherer, Adams, and Wiebe (1989) suggests that Social Learning Theory (SLT) can help explain why parental influence can affect why a person decides to become an entrepreneur. Specifically, parental influence directly affects two personality characteristics - need for achievement and internal locus of control (Crandall & Katovsky, 1965; McClelland, 1961). Research has indicated that need for achievement and internal locus of control are both characteristics of entrepreneurs (McClelland, 1961; Thomas & Mueller, 2000).

The need for achievement is a desire to complete effectively a goal or task in a manner that exceeds past accomplishments (Yukl, 1989). When taught self-reliance, children acquire a need to achieve and have a propensity towards entrepreneurship (McClelland, 1961).

Developed around eight years of age (Crandall & Katovsky, 1965), locus of control is the magnitude to which an individual perceives success and failure as a consequence of their personal initiatives (Rotter, 1966). In comparison to non-entrepreneurs, entrepreneurs have a higher internal locus of control (Shapero, 1975); indicating their beliefs that personal initiatives as opposed to outside factors influence their level of success. Persons with an internal locus of control have a predisposition to influence their environment (Rotter, 1975), which explains why many entrepreneurs own businesses for the opportunity to explore new ideas (Litvak & Maule, 1974).

Other characteristics of entrepreneurs (i.e., belief in hard work, satisfaction with delayed gratification, and moderate risk propensity) can also be influenced by their socialization. Certainly, personality characteristics can be inherited. For example, studies have shown an average heritability rating of 50 percent for varying personality characteristics (Goldsmith, 1983; Loehlin & Nichols, 1976; Tellegen, Lykken, Bouchard, Wilcox, Segal, & Rich, 1988). Regardless of whether the personality traits come from nature, nurture, or a combination of the two, some personality traits do appear to be associated with those willing to become entrepreneurs.

*Entrepreneurship and Protestant Work Ethics*

This study specifically focuses on PWE beliefs as opposed to other behavioral tendencies because specific attributes of entrepreneurs (i.e., need for achievement, internal locus of control, belief in hard work, and satisfaction with delayed gratification) have also been identified in PWE believers (Bonnett & Furnham, 1991).
Max Weber introduced the Protestant Work Ethic in an article entitled, “The Protestant work ethic and the spirit of capitalism” (Weber, 1958). In his article, Weber attempted to determine the role of Protestantism in the development of capitalism (Arslan, 2000). The original work of Weber (1958) focused on Protestantism and implied moral and religious justifications for the accumulation of wealth and the rise of capitalism. No longer discussed in a religious context, today PWE is viewed as a belief concerning the extent to which people place work at, or near, the center of their lives (Furnham, 1990).

The original work of Weber also suggested that several differences in entrepreneurial activities were the result of cultural and religious factors, specifically a society’s acceptance of PWE beliefs (Thomas & Mueller, 2000). Some researchers, such as Thomas and Mueller (2000) have indicated that the ideal profile of an entrepreneur is someone who reflects the characteristics of Protestantism and achievement.

There are no well-defined statements on the actual dimensions of PWE beliefs (Arslan, 2000). However, in general, PWE refers to the following attributes and beliefs: need for achievement; internal locus of control; belief in hard work; and satisfaction with delayed gratification (Bonnett & Furnham, 1991). Additionally, supporters of PWE view idleness, wasting time and money as vices; ambition, success, and wealth as positive attributes (Furnham, 1990; 1987).

*Protestant Work Ethic and Work Values*

Before continuing the discussion on PWE beliefs, it is important to understand the relationship between PWE beliefs and work values. “Work values” is an umbrella term used to describe a variety of constructs, ranging from business ethics to work preferences (Dose, 1997). PWE has been utilized in past studies to measure one element of work values (Kidron, 1978; Ryan, 2002).

A study by Bonnett and Furnham (1991) revealed some interesting findings concerning young adolescents interested in entrepreneurial ventures. Study findings indicated that young adolescents interested in entrepreneurial ventures differed from their peers with respect to their PWE beliefs; specifically, those interested in entrepreneurship more positively endorsed PWE beliefs, such as the belief in hard work, in comparison to the other study participants (Bonnett & Furnham, 1991).

*Inconsistencies between Entrepreneurship and Protestant Work Ethic Beliefs*

Despite the similarities in the characteristics of entrepreneurs and those who value PWE beliefs, some inconsistencies do exist. For example, research indicates that PWE believers, unlike entrepreneurs, are more conservative in their views and are risk adverse (Bonnett & Furnham,
Despite this inconsistency between entrepreneurs and PWE believers, this researcher believes enough similarities (i.e., need for achievement, internal locus of control, belief in hard work, and satisfaction with delayed gratification) remain to suggest that a relationship exists between entrepreneurs and the endorsement of PWE beliefs. As a result, embracing PWE beliefs may influence the development of entrepreneurial spirit, which is defined by this researcher as an inclination towards an entrepreneurial mindset and tendencies. This study will specifically examine three dimensions of PWE beliefs (moral importance of work, pride in craftsmanship, and desirability of work outcomes) (Cherrington, 1976; Cherrington, Condie, Crawford, England, & Wright, 1975; Cherrington, Condie, & England, 1979).

**Hypothesis 1a:** A positive relationship exists between the moral importance of work dimension of PWE beliefs and entrepreneurial spirit.

**Hypothesis 1b:** A positive relationship exists between the pride in craftsmanship dimension of PWE beliefs and entrepreneurial spirit.

**Hypothesis 1c:** A positive relationship exists between the desirability of work outcomes dimension of PWE beliefs and entrepreneurial spirit.

The first phase of this study focused on the relationship between PWE beliefs and entrepreneurial spirit. The second portion of this study will examine the relationship between entrepreneurial spirit and venture formation. Does an entrepreneurial spirit predispose one to be an entrepreneur? This next hypothesis, attempts to associate entrepreneurial spirit to the actual formation of a company.

As mentioned previously, entrepreneurial spirit inclines an individual to have an entrepreneurial mindset and tendencies. Persons with entrepreneurial spirit have characteristics similar to entrepreneurs such as lots of energy, acceptance of change, developing new opportunities, and approaching tasks in a unique way. As a result of possessing entrepreneurial characteristics, the possession of an entrepreneurial spirit may result in the formation of a business venture.

**Hypothesis 2:** The possession of an entrepreneurial spirit is positively associated with the formation of a business venture.

Educational Attainment and Venture Formation

In most cases, entrepreneurs are more educated than the general population (Brockhaus & Horwitz, 1986; Cooper & Dunkelberg, 1987). Although formal education is not a prerequisite for engaging in entrepreneurial activities, formal education is a good experience if related to the entrepreneur’s business specialty (Hisrich, 1990).

Additionally, the degree of educational attainment may serve as a proxy for persistence, motivation, and self-discipline (Coleman, 2004). A study of U.S. firms indicated that companies
with more educated owners were significantly more likely to survive (Bates, 1995). For example, in terms of financial capital, commercial banks make larger loans to entrepreneurs with higher levels of education (Bates, 1995). The review of literature suggests that an entrepreneur’s education can influence venture formation.

**Hypothesis 3**: Educational attainment influences the relationship between entrepreneurial spirit and business venture formation.

**Gender and Venture Formation**

Gender is an area of interest in entrepreneurial research (Baker, Aldrich, & Liou, 1997). Today, more women than in past years are choosing entrepreneurship as a career path (Menzies, Diochon, & Gasse, 2004). Although the number of female entrepreneurs has increased over the years, negative stereotypes, such as female entrepreneurs do not desire high growth businesses (Brush, Carter, Gatewood, Greene, & Hart, 2001), still exist.

Although false, such stereotypes may hinder female entrepreneurs from gaining access to capital and may impede their entrepreneurial potential (Brush et al., 2001). In a study by Carter and Rosa (1998), a significant difference was found between the amount of start-up capital obtained by men and women, with women receiving less start-up capital than men. For example, on average, in business sectors such as textile and clothing, business services, and hotel and catering, men use three times as much start-up capital than women (Carter & Rosa, 1998).

Additionally, the magnitude of the business at startup is considered to be closely related to growth potential (Menzies, Diochon, & Gasse, 2004). In general, women start businesses on a smaller scale (Menzies, Diochon, & Gasse, 2004), which poses a disadvantage (Coleman, 2002). For example, many home-based businesses are owned by women (Carter, Van Auken, & Harms, 1992).

Not surprisingly, many female entrepreneurial ventures are less likely to survive than male entrepreneurial businesses (Menzies, Diochon, & Gasse, 2004). A study of 203 new firms in the retail industry indicated that businesses owned by women failed more frequently than businesses owned by men (Carter, Williams, & Reynolds, 1997).

Studies on the characteristics of female entrepreneurs also suggest educational attainment (Hisrich & Brush, 1986) and career path (Srinivasan, Woo, & Cooper, 1994) are two distinguishable and problematic areas for female entrepreneurs. In a study by Hisrich (1990), several entrepreneurs indicated educational needs in the areas of finance, strategic planning, marketing, and management. Most female entrepreneurs hold degrees in English, psychology, education, and sociology (Hisrich & Brush, 1986) with comparatively few possessing business
degrees. Furthermore, in comparison to their male counterparts, women have taken fewer business start-up courses (Menzies, Diochon, & Gasse, 2004).

This need for business skills places many women at a disadvantage. In addition to having more non-business degrees and fewer business skills, women also have less work and managerial experience (Srinivasan, Woo, & Cooper, 1994). Because of the obstacles women face, it is posited that gender will influence the relationship between entrepreneurial spirit and venture formation.

**Hypothesis 4**: Gender influences the relationship between entrepreneurial spirit and business venture formation.

**METHODOLOGY**

*Sampling criterion and data collection*

This study was conducted to determine if entrepreneurial spirit could help answer the question of what factors incline an individual to have an entrepreneurial mindset and tendencies. To ensure a diverse sample, distance learners enrolled in MBA and Executive MBA programs at a major university in the Southeastern United States were sampled. Initially, the sample size was approximately 450 MBA students. To increase the sample size, each MBA distant learner was mailed 10 surveys. The MBA students were asked to complete one survey and have nine other individuals (e.g., friends, colleagues, customers, or others) complete the remaining surveys.

The only criterion for participating in the survey was that each individual be employed fulltime. A postage-paid, pre-addressed return envelope was provided with each questionnaire. Initially, 362 surveys were returned, representing an 8 percent return rate. After reviewing the surveys, those surveys with pertinent missing information were discarded. The final sample size of the study was 335.

*Sample Demographics*

An overview of respondent demographics is shown in Table 1. Over half of the respondents (73%) resided in the Southeastern region of the United States. The majority (87%) of the respondents were white and 8 percent were black. On average, the participants in this study were 39 years of age (M = 38.66; S.D. = 9.80) and the majority (92%) had attended college. Almost half of the respondents (44%) held non-supervisory positions, while the other participants were
employed in first-line management (19%), mid-management (27%), and upper management (10%) positions.

Table 1. Total Sample Demographics

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RESEARCH CONSTRUCTS AND ITEMS OF INTEREST

Entreprenurial Spirit
Various statistical methodologies were used to analyze the hypotheses posited in this study. In this study, entrepreneurial spirit was used to gauge the participants’ predisposition to engage in future entrepreneurial activities. To assess an individual’s entrepreneurial spirit a composite score was obtained from an entrepreneurship scale consisting of 18 items. The coefficient alpha for the entrepreneurial spirit construct was acceptable at 0.78.

The items comprising the entrepreneurial spirit construct were scored on a 7-point Likert scale ranging from strongly agree (1) to strongly disagree (7). An example of the items used to determine the participants’ entrepreneurial spirit are, “I believe that to become successful in business you must spend some time every day developing new opportunities” and “I feel terribly restricted being tied down to tightly organized business activities.”

**Work Values**

Three work value scales (i.e., desirability of work outcomes, pride in craftsmanship, and moral importance of work) developed by Cherrington and several colleagues (Cherrington, 1976; Cherrington, Condie, Crawford, England, & Wright, 1975; Cherrington, Condie, & England, 1979) were used to evaluate PWE. According to Cherrington, Condie, and England (1979) work ethic values are best estimated by using these three primary scales. The coefficient alphas for each primary scale were determined. Desirability of work outcomes was acceptable at 0.79; pride in craftsmanship was low at 0.61; and moral importance of work was unacceptable at 0.39. As a result of the low coefficient alpha for moral importance of work, this scale was dropped from the analysis.

To measure the participants’ desirability of work outcomes, participants answered the question, “How desirable and important do you think the items associated with your work are?” The participants answered the question for a variety of statements by using a 10-point Likert scale ranging from extremely desirable (1) to extremely undesirable (10). Two examples of the statements used to answer the question are, “Getting more money or a larger pay increase” and “Being promoted more quickly.”

To gauge pride in craftsmanship, participants responded to this statement “People work for a variety of reasons and feel differently about the things they get from their work. We would like to know how probable the following things are if you work hard.” Study participants rated the statements given on a 7-point Likert scale ranging from 100% certain (1) to 100% improbable (7). Two of the pride in craftsmanship statements are “A worker should do a decent job whether or not his/her supervisor is around” and “A worker should feel a sense of pride in his/her work.”
To test hypotheses 1b-c, a regression analysis was run to determine if a positive relationship exists between an individual’s entrepreneurial spirit and PWE beliefs (i.e., desirability of work outcomes and pride in craftsmanship).

Study participants were able to indicate their involvement in a venture formation(s) (H2) by answering yes or no to the following question, “Are you, alone or with others, now trying or have you previously tried to start a business?” To examine hypothesis 2, a 2-sample t-test was performed to determine if entrepreneurial spirit is significantly related to venture formation. If the results for hypothesis 2 indicate that entrepreneurial spirit is associated with the formation of a company, then the researcher tested hypotheses 3 and 4.

To assess educational attainment, study participants were asked to indicate the number of years they attended high school, technical school, and/or college. Then, the total years of education were calculated. To test the final two hypotheses (H3 and H4) a binary logistic regression was run to determine if educational attainment and gender (respectively) influences the relationship between entrepreneurial spirit and forming a business.

RESULTS

Entrepreneurial Spirit and PWE Beliefs

Regression analysis was used to examine the relationship between entrepreneurial spirit and the two primary scales (i.e., desirability of work outcomes and pride in craftsmanship) used to evaluate PWE beliefs (H1b-c). As expected, significant relationships were found between the two primary scales and entrepreneurial spirit.

Hypothesis 1b states a positive relationship exists between entrepreneurial spirit and pride in craftsmanship. Results did reveal a significant relationship between pride in craftsmanship and entrepreneurial spirit (p-value<.05). Hypothesis 1b was supported.

Hypothesis 1c examines the relationship between entrepreneurial spirit and desirability of work outcomes. Study findings indicate a significant relationship between desirability of work outcomes and entrepreneurial spirit (p-value < 0.05). Hypothesis 1c was supported.

Entrepreneurial Spirit and Venture Formation

Hypothesis 2 states the possession of an entrepreneurial spirit is positively associated with the formation of an entrepreneurial venture. Contrary to expectations, the results of the 2-sample t-test indicated that there is no difference between the level of entrepreneurial spirit for those
persons who decide to start a company and those who do not (p-value = .71). Hypothesis 2 was not supported. As a result, hypotheses 3 and 4 were not tested.

**DISCUSSION**

The findings of this study suggest that examining entrepreneurial spirit may help answer the question, what factors incline an individual to have an entrepreneurial mindset and tendencies. Answering this question may provide valuable insight into the study of entrepreneurs. The results of this study indicate that significant relationships exist between the two work value scales (i.e., desirability of work outcomes and pride in craftsmanship) used to evaluate PWE and entrepreneurial spirit.

Some researchers state that an ideal profile of an entrepreneur is someone who reflects the characteristics of Protestantism and achievement (Thomas & Mueller, 2000). According to this study, results do indicate that persons with entrepreneurial spirit do embrace various aspects of PWE. However, the second phase of this study did not show a relationship between entrepreneurial spirit and business venture formation. Thus, this researcher posits that examining a person’s entrepreneurial spirit is more indicative of their tendency to engage in intrapreneurship in comparison to entrepreneurship.

Engaging in entrepreneurship, requires more than an entrepreneurial mindset and tendencies. The actual formation of a business venture requires other inputs such as capital, time commitment, and in many instances the emotional support of family and friends. As a result of the varying factors in addition to possessing an entrepreneurial mindset that are involved in the creation of a business, many persons with an entrepreneurial mindset and tendencies may choose to engage in intrapreneurship.

Research indicates that entrepreneurs and intrapreneurs have similar characteristics such as family background, attitudes about work, and risk-taking propensity. For example, research by Pinchot (1985) indicates that intrapreneurs similar to entrepreneurs have a family history of an entrepreneurial small business. Additionally, similar to entrepreneurs, intrapreneurs desire direct involvement in activities as opposed to delegation and are moderate risk takers (Pinchot, 1985).

**Implications**

The study results indicate that studying entrepreneurs is complex. Although, study findings indicated a relationship between entrepreneurial spirit and PWE, the lack of relationship between
entrepreneurial spirit and venture formation indicates other factors impact the formation of a business venture. As discussed earlier, some individuals may choose to engage in intrapreneurship, while others may never engage in neither intrapreneurship nor entrepreneurship.

Although a complex research stream, empirical research in this study area is needed. This implies that research is promising and that researchers interested in trying to determine what factors can be used to identify potential entrepreneurs should further explore this research stream. Nevertheless, researchers should take into consideration the divergent paths persons with an entrepreneurial spirit can follow.

Limitations

This study has several weaknesses. First, is the difference between persons with entrepreneurial spirit and persons who actually engage in entrepreneurial activities. Having entrepreneurial spirit does not definitely indicate that the person will later engage in entrepreneurial activities.

Another limitation of this study is the imbalance between the number of entrepreneurs and non-entrepreneurs included in the study. Future studies should include more entrepreneurs.

The next limitation is the absence of other potential factors that can influence venture formation. The number of factors that can affect the formation of a business venture are numerous. Capturing all these factors in a study may not be feasible. It is important that persons with entrepreneurial spirit are aware that other factors have the potential to limit the formation and survival of a business. Thus, possessing entrepreneurial spirit is not a guarantee for the development and success of a business venture.

Future Research

This study has numerous avenues for future research ranging from improving methodological aspects of the study to implications for intrapreneurship. As with many foundational studies, the success of this research stream is in part dependant on methodological improvements.

One important methodological improvement for future research is to reexamine the pride in craftsmanship construct to determine if this variable is a good indicator of PWE beliefs. Additionally, future research should also reevaluate the desirability of work outcomes and moral importance of work constructs to improve the reliability of these measures. Reevaluating these constructs can improve the accuracy of future studies.
Future research should also attempt to use a population with a larger percentage of entrepreneurs. Differences may exist between persons with entrepreneurial spirit and persons who actually engage in entrepreneurial activities. Possessing entrepreneurial spirit does not guarantee future engagement in entrepreneurial activities. A study population with a larger percentage of entrepreneurs can add validity to this area of research and possibly serve as a comparison study.

If methodological advancements in this stream of research do not result in a positive relationship between entrepreneurial spirit and venture formation, other research alternatives should be examined. For example, future research should examine if people with entrepreneurial spirit are more inclined to engage in intrapreneurship. Additional research in this area may indicate that entrepreneurial spirit more accurately predicts future engagement in intrapreneurship than entrepreneurship. Specifically, persons with entrepreneurial spirit may become intrapreneurs because the risk factors for intrapreneurship (e.g., finances) are fewer.

With this study serving as a foundation, future research that includes sound methodology and rigorous empirical testing can further validate the relationship(s) that exists between entrepreneurial spirit, PWE beliefs, and venture formation.

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Charismatic Leadership Up Close: Entrepreneurship & Charisma

Janice A. Black, California State University, Bakersfield, jblack14@csub.edu
Richard L. Oliver, New Mexico State University, roliver@nmsu.edu
Lori D. Paris, California State University, Bakersfield, lparis@csub.edu
Jon Howell, New Mexico State University, jhowell@nmsu.edu

ABSTRACT

Charismatic leaders are thought to enhance work groups and their ability to attain high performance levels. Given that the enhancing affect of the charisma factor only applies when the follower perceives the leader as being charismatic, using an agent-based model we are able to ascertain that followers in a small firm startup still lag seeing the entrepreneur as charismatic especially once a firm is established as opposed to early and more uncertain stages of the new venture life cycle. Furthermore, there was no effect from charisma in groups with high levels of context for learning and effective leaders.

INTRODUCTION

There is a small but growing body of literature that points to the potential importance of charismatic or transformational leadership behavior to an entrepreneur during critical conditions faced at firm startup. One of these conditions being the environmental uncertainty that exists at startup that requires a leader to possess such competencies as the ability to articulate a vision (Strange & Mumford, 2002) which results in follower recognition and eventual commitment to the entrepreneurs goals and priorities (Yukl, 1999). Entrepreneurs not only impact, but also imprint their personality on their organizations. Charismatic leadership could be very beneficial in this area, as charismatic leaders use frame alignment to guide followers (Howell & Costley, 2006) and are viewed as having an intense impact on their followers (Waldman & Javidan, 2009). Given some of these conditions, we acknowledge the potential impact that charismatic leadership could make during an entrepreneurial startup.

Both the leadership and entrepreneurship literature have received great attention over the last 25 years. For example, charismatic leadership has been studied under the guises of charismatic (Waldman & Yammarino, 1999), transformational (Bass, 1990), visionary (Sashkin, 1988) and inspirational (Nanus, 1992) leadership. Many entrepreneurs arise from necessity or opportunity (Block & Sander, 2009), but have also been viewed as novice, serial, and portfolio (Westhead, Ucbasaran, & Wright, 2005). This paper seeks to renew the linkages between these two separate literature streams (Becherer, Mendenhall, & Eickhoff, 2008), especially in light of calls in both literature streams that want a
dynamic research orientation to cross-sectional work (Burpitt, 2009) and in particular, to examine the changes in leadership perceptions overtime (Waldman & Javidan, 2009). One way to begin to explore the implications of dynamic, mutual and interactive, socially created phenomena is to use advanced computer simulation techniques (Harrison, Carroll, & Carley, 2007). Recently, complex system simulations or agent-based simulations have been used in leadership research (Hunter, Bedell-Avers & Mumford, 2009; Black, Oliver, Howell & King, 2006).

In this paper, we present a computer simulation model that uses agent-based modeling to simulate the relationships between an entrepreneurial leader and the associated employees. The employees make independent determinations if the entrepreneur is acting as a charismatic leader. The employees do not see everything that the leader does, forget what they have seen if it is not repeated, and prefer to continue in their current perception of the leader until it is clear that the entrepreneur’s behaviors have consistently met their expectations of what a charismatic leader should do.

After developing the model from current empirical literature on the effects of charismatic leaders on perceiving followers, we will test system level hypotheses by graphing the output of key variables across iterations. Recall that we wondered if the entrepreneur’s charismatic leadership behavior would make a difference during an entrepreneurial startup. We begin by reviewing the applicable charismatic literature, the relevant entrepreneurial conditions and develop hypotheses. Next, we summarize an agent-based simulation that models the generation of a socially constructed strategic resource, the context for learning along with performance, and detail how we bring the charismatic leadership qualities and processes to that published model.

CHARISMATIC LEADERSHIP

A highly sought out goal of management research has been studying and creating synergistic results between a supervisor and a work group. Synergistic results indicate that the outcome of a group’s productivity is greater than the sum of each group member’s respective productivity. Finding evaluative situations of the outcome due to leader/follower synergies is difficult. One leader behavior that does seem to influence organizational performance and can be modeled is Charismatic leadership (Waldman & Yammarino, 1999; Howell & Costley, 2006; Yammarino and Bass, 1990; among others).

According to studies that measure charismatic leadership’s effect on performance, charismatic leaders demonstrate exceptional leadership qualities including the ability to articulate a vision, a sense of purpose or mission, high expectations and determination (Waldman & Yammarino, 1999). Further, many experts have focused not only on the
leader's behaviors (Kirkpatrick & Loche, 1996), but also on the attributes of followers (Yukl, 1998), and on the context or situational factors where charismatic leadership was found or emerged (Conger & Kanuengo, 1988; Bass, 1990; Howell, Dorfman, Hihino, Lee, & Tate, 1994). For example, charismatic leadership increased organizational performance under conditions of uncertainty (Waldman & Yammarino, 1999; Howell & Costley, 2006). Thus for charismatic leader behaviors to have an effect, they must be recognized by followers.

ENTREPRENEURSHIP

People often choose careers that reflect their person understandings of themselves and their abilities. Entrepreneurial types will tend to face novel settings filled with uncertainty (Holcomb, Ireland, Holmes & Hitt, 2009). The failure rate for new firms is about 33% for the first two years and then an additional 20% for the next two years (Barringer & Gresock, 2008). Thus, entrepreneurs face conditions of relatively high uncertainty for a good four years. While many entrepreneurs can handle such conditions of high uncertainty, their followers may be triggered to look for a charismatic leader for guidance.

Furthermore, only three percent of small businesses have more than 20 employees (Moutray, 2006). This means that almost all small businesses can be considered micro-businesses. In such small businesses, one can expect that all involved in the business know each other and often work side by side with each other. Such small establishments often require all employees to be able to wear multiple hats and help out in all of the areas of the business. Thus, for these small businesses it is vital that all of the employees understand the strategic goals of the entrepreneur. Indeed, there are those who have found that a charismatic leadership style to be important to help employees bond to the new organization (Schlosser & Todorovic, 2006).

When we consider the founder-manager entrepreneur, we find several attributes similar to those of charismatic leaders. For example, both have more innovative problem solving styles (Walsh & Anderson, 1995) and are highly confident and optimistic (Palich & Bagby, 1995). Thus we can expect to find charismatic leaders among those entrepreneurs who start up and run a firm. However, it is important to keep in mind that the environmental level of uncertainty is a necessary requirement for triggering the need in followers to look for and recognize a charismatic leader. Since a firm start up will go through a series of stages during its life cycle (Vecchio, 2003), these high levels of uncertainty will dissipate and the lower levels will not always trigger the need for a charismatic leader.
From this literature, we can conclude that the new venture startup and micro-business contexts will be uncertain enough during the first four years to trigger a need in followers to be open to charismatic leaders. These conditions of relatively high uncertainty will dissipate over the years until there are conditions for low levels of uncertainty present. We can also see that is it reasonable to expect that some entrepreneurs may also be classified as charismatic leaders. From this understanding, we now move to the development of our hypotheses.

**HYPOTHESIS DEVELOPMENT**

Implicit leadership theory (Hall and Lord, 1998) and recognition based process theory (Lord & Maher, 1991) have been used by researchers to determine how followers categorize leader attributes and how they go about matching individuals to these leadership categories (Hall & Lord, 1998). Information about specific situations or individuals are encoded, stored, and retrieved in terms of category structures and inferential strategies. Lord and Maher contend that novices and experts will differ substantially in the amount and way they structure their knowledge about leadership. It is through general day-to-day experiences, particularly in organizational contexts, that people develop detailed knowledge structures pertaining to leadership (Lord & Maher, 1991). According to this theory, individuals exposed to charismatic leadership in the past will be more apt to recognize it in the future. We believe that when followers have a high level of experience with charismatic leadership behavior, they are more apt to recognize a charismatic leader when they see one. This leads to the following hypothesis;

**H1:** High charismatic leadership will be recognized by a follower in fewer iterations when the follower has a high level of level of charismatic experience than when followers have a low level of charismatic experience.

Since Schlosser and Todorovic (2006) note that charismatic leadership might be useful for entrepreneurs in creating a bond with the employees, we also will examine the amount of variance among the followers that occurs with and without charisma. We expect that those entrepreneurial firms where the leader has a high charismatic profile and is recognized as a charismatic leader by the followers would have lower variation in responses among followers than those whose leaders have low charismatic profiles or who aren’t recognized by the followers as charismatic. Thus,

**H2:** Leaders with high Charismatic Profiles will result in lower levels of variation among followers than those groups where leaders have low Charismatic Profiles.
CONTEXT FOR LEARNING

One area that research has been conducted on the emergence of/or factors that affect the leaders development of organizational competencies and firm performance. This paper examines the possible emergence and affect of charismatic leaders on the development of the organizational competency, Context-for-Learning. We do so through the use of a computer model of the development of a Context-for-Learning since it includes specific leader behaviors (Black, Oliver & Paris, 2008; Black, et al., 2006) by adding the identification and recognition of charismatic leaders.

The Context-for-Learning Developmental Model

Black and associates (2006) presented a computer model for the social construction of the group level competence, Context-for-Learning. The Context-for-Learning's make up was previously identified by Ghoshal and Bartlett (1994) and confirmed by Black and Boal (1997). Because this competence is one that is both created and re-created by the members of the organization and is hence socially constructed, the individuals involved in the group and their rules of interaction are critical to the formation of the Context-for-Learning. Black, Oliver, and Paris (2008) extended this model to include the ramifications of forgetting.

The model has the individual group members contributing to the group level Context-for-Learning through their relative strength in individual competence. Thus, the group level Context-for-Learning was comprised of the weighted average of the individuals involved in the group. This group level competence in turn influenced the experiential learning of the individuals.

Individuals were assumed to learn about their environment and the necessary skills through their day-to-day experiences. To calculate this experiential learning, the levels of skill in the various components of the Context-for-Learning were translated via a traditional S-curve into learning factors that increased an individual's skill level in subsequent time periods. These factors were calculated for the individuals and the group. Because these factors were assumed to be compensatory (Black and Boal, 1994), each individual's factor was averaged with the group factor to provide an adjusted learning factor. If an individual was very different from the group, then a weighted average was used where the individual's contribution was three times that of the group.
Social Construction of Context-for-Learning

Black and colleagues (Black et al., 2006) found that the collection of individuals and their individual levels of a Context-for-Learning made a difference in the development of the group Context-for-Learning. They also found that the same leader has very different effects on the development paths through his/her influence on individuals when there are different sets of individual present. Specifically, they found that a leader with a high individual Context-for-Learning index embedded in a group which on average also had a high individual Context-for-Learning indices, has a non-linear effect on the developmental path of the group Context-for-Learning. That same leader embedded in a group with an on average low Context-for-Learning still has a positive influence on the development path but it is less steep and more linear. This effect was even more pronounced with the inclusion of forgetting (Black, Oliver & Paris, 2008).
Charismatic Leadership, Leader Behavior, and the Context-for-Learning

Howell and Costley (2006) in their review of current leadership behaviors noted that charismatic leadership has been extensively researched. They presented a process model of charismatic leadership (Howell & Costley, 2006: p 249) and the affect charismatic leadership behavior has on follower and group psychological reactions and behavioral outcomes, such as performance. The model denotes the areas of research that has been conducted in terms of leader characteristics and behavior (Kirkpatrick & Locke, 1996), situational factors that enhance or decrease charismatic leader behavior (Conger & Kanungo, 1988; Bass, 1990; Howell, Dorfman, Hibino, Lee, & Tate, 1994) and characteristics of the followers (Yukl, 1998). Howell and Costley (2006) go on to indicate how the model would be applied.

The three main activities in applying the charismatic leadership model are 1) diagnosing the situation, 2) providing charismatic leadership, and 3) modifying followers and situations. Diagnosing the situation consists of looking to see that one of any of the conditions that enable followers to respond to charismatic leadership is present. Such conditions include presence of a crisis or major change, tasks that are inherently creative or satisfying, a history of charisma, leader in a high position, status or expertise, formal plans that support the company's mission or educated and professionally-trained followers.

Providing charismatic leadership includes 1) advocating a moral mission and vision, 2) using inspirational rhetoric, 3) building own image in follower's eyes, 4) modeling behavior for followers with high expectations and confidence, 5) taking risks to achieve mission, and 6) frame alignment to guide follower behavior. Modifying followers and situations includes 1) alleviating crises, distress, anxiety, isolation, low self-esteem, or extreme uncertainty, 2) make followers' tasks more creative and satisfying, 3) increase own rank, status and expertise, 4) create plans, goals, and procedures that support or replace the leader's mission, and 5) develop educated or professional followers. Notice that by modifying the situation and/or followers the leader is working to enhance the effectiveness of charismatic leadership.

The effectiveness of charismatic leadership is predicated on the followers noticing that the charismatic leader is present and taking action and positive perceptions by the followers of the environment as measured by the Context-for-Learning. Once the follower's perceive a leader as being charismatic, they willingly follow the leader. Once identified as charismatic, the leader is more likely to continue to be characterized as being charismatic. The effect of the charismatic leader goes beyond the positive influences of the leader's behavior. The effect results in sustained enhanced performance.
From this work, we add to the model an additional area of influence from the leader to the followers. From the leader's behaviors already identified through Quinn's Competing Values framework, a determination of the presence of charismatic behaviors is made. Taking a conservative stance, once all behavior areas identified by Howell and Costley as needed for charismatic leadership are present at high levels the leader's Charisma Factor will be present. However, before there is any enhancement of a follower the follower must also perceive the leader as being charismatic. Once the follower perceives the leader as charismatic, the follower will notice the leader again next time. However, just because a leader acts in a charismatic way one time, does not mean that the leader will routinely act in such ways. Thus, the follower examines the leader across time to determine if the leader really is a charismatic leader. While there may be a number of the leader’s behaviors which would be sufficient evidence of the leader’s acting charismatic, we will take the conservative approach and require all of the leader’s charismatic behaviors to be at a higher skill level for the follower to acknowledge that charismatic leadership is present. Furthermore, since people can become sensitized to issues and begin to see them in areas previously not considered, we allow a follower who has experienced a charismatic leader before (i.e. they have charisma experience (CE) as a follower) to find it easier to recognize a charismatic leader. They will be able to spot one even if Charismatic behaviors are present only 60% of the time. This means that if an experienced CE follower spots a leader evidencing charismatic behaviors 3 of the last 5 times that they noticed the leader, then they will characterize that leader as charismatic. An inexperienced or low CE follower would need closer examples of those charismatic skill and to have them happen in a relatively short period of time. Thus the Low CE follower will only characterize a leader as being charismatic if they saw the evidence in 3 of the last 3 times.

**METHOD**

Agent-based modeling (ABM) as mentioned earlier has risen in popularity as an effective way to study phenomena with inherent dynamics such as social phenomena (Harrison, Carroll, & Carley, 2007). This manuscript uses an ABM that was developed from previously published theory and empirical work and uses data generated to specific boundary conditions. All references to “leaders” and “followers” then mean virtual model representations and not actual people.

Because there are stochastic elements in the model and decision choices are at the level of the individual, two runs using the very same input can have variation in output reflecting those choices and “randomness”. We thus run each experimental condition 100 times and present the results as an average graph. Each line on the graph thus is significantly different than even a very close neighboring line. We next present the
operationalization of charisma. In the final area of this section, you’ll find the actual results of the simulation with explanatory comments.

**Figure 2: Charisma, Leader Behavior & The Context for Learning**
Operationalization of Charisma Factor

For this paper, the presence of high skill levels in the behaviors of charismatic leaders will be an indication of a charismatic leader. In other words, it is not sufficient to simply advocate a moral mission; one must be able to do so effectively. Three critical time phases were identified: the first two years are considered to have high levels of uncertainty, the next three years are considered to have both high and low levels of uncertainty and beyond five years are considered to have low levels of uncertainty (Waldman, et al., 2001). This incorporates the work by Barringer & Gresock, (2008) which recognizes a drop in uncertainty levels after the first two years but relatively continued high levels until the end of year four. The level of uncertainty is used to provide rules for follower’s perception of a leader’s charisma profile to feedback into a follower’s Context-for-Learning.

Charismatic Leadership Behaviors. We begin by operationalizing the behaviors associated with providing charismatic leadership. Each of the behaviors associated with charismatic leadership by Howell and Costley will first be explained. This will be followed by the operationalization of the Charismatic behaviors with behaviors from the computer model from Quinn's competing values framework. The average of the operationalized items will be generated for the scale value. The groupings of these scales are in Table 1.

| Table 1 |
| Leadership Charismatic Profile Factor | Scale Items |
| LCP 1: Advocating a Moral Mission | 1. I have a clear set of values.  
   2. I am very honest with myself.  
   3. The company and I have aligned values.  
   4. I know how to create a vision for my organization.  
   5. The company’s mission is a meaningful guide. |
| LCP 2: Using Inspirational Rhetoric | 1. I am an effective public speaker.  
   2. In making an oral presentation, I know how to get people’s attention.  
   3. In communicating, I am very sensitive to feelings.  
   4. I have a passionate commitment to the things I do.  
   5. I often inspire people to do more than they are expected to do. |
| LCP 3: Building Own Image in Follower’s Eyes | 1. I have a clear image of who I am.  
   2. I recognize and work on my inconsistencies and hypocrisy.  
   3. I work hard at being honest and sincere.  
   4. I know how to build personal power through the involvement of others.  
   5. There is a high degree of trust across work groups at my work |
Table 1

<table>
<thead>
<tr>
<th>Leadership Charismatic Profile Factor</th>
<th>Scale Items</th>
</tr>
</thead>
</table>
| LCP 4: Modeling Behavior for Followers with High | 1. My own personal coping strategies help me adapt to change.  
2. I have a passionate commitment to the things I do.  
3. I love to feel challenged by the tasks I have to do.  
4. I am an unusually hard worker.  
5. I always establish a specific set of challenging goals. |
| LCP 5: Taking of Risks/Being Innovative to Achieve Mission | 1. I try to treat any new problem as an opportunity.  
2. I am comfortable living with change.  
3. I like to explore new ideas.  
4. As a manager, I come up with inventive ideas.  
5. As a manager, I search for innovations and potential improvements. |
| LCP 6: Frame Alignment to Guide Follower Behavior | 1. I am skilled at facilitating organizational change.  
2. I know how to use the organizational culture to help employees adapt to change.  
3. I know how to run a meeting in which everyone feels involved and influential in the decisions that are made.  
4. I am able to mentor people and help them grow and develop.  
5. I am able to advise subordinates on important matters relating to their growth and development. |

RESULTS

The first hypothesis examines the condition of the follower and argues that those with previous experience or if you will a recently activated scheme of charismatic leadership will recognize the leader as being charismatic sooner than those with low levels under both conditions of certainty and uncertainty. In Figure 3, we see that this is the case. The graphs of the followers’ Charisma experience at high levels are higher and reach 7 sooner than those who had low initial FCE values. This hypothesis is supported.

In the last hypothesis, we examine the variation among the followers as they are creating the socially constructed resource. Our hypothesis calls for lesser variation when charismatic leaders are present since they help the followers bond to the organization and become more cohesive. We look to a variation graph to determine the results to this hypothesis found in Figure 4.

In examining the graphs, it appears that for groups with ineffective leaders and a corresponding low context for learning that there is indeed significant reduction in variance. However, for groups where there is an effective leader and existing high levels...
of context for learning there isn’t a significant decrease in variance. Thus Hypothesis 2 is partially supported.

**Figure 3: Graph for results of Hypothesis 1**

**Figure 4: Graph Results for Hypothesis 2**
CONCLUSION

Computer models enable the examining of theoretical linkages when examining such linkages in either a laboratory setting or a field setting is not practical. In this instance, the competency, Context-for-Learning, is socially constructed and has strong history effects. The use of the computer model to conduct virtual experiments is thus very useful. This type of virtual experiment is also useful when examining the emergence and effects of charismatic leadership.

Interesting system effects were found by examining charismatic and non-charismatic entrepreneurs in the agent based model. We discovered that the model does predict a stronger detection of charisma during the times in the lifecycle of the organization when there were high levels of uncertainty; however, the growth and response to charisma didn’t stop when the new firm cycled into the lower uncertainty phase but did continue at a reduced level. We also found that for organizations with low levels of context for learning and ineffective leaders that charisma made a difference in the variations of responses of the followers under both conditions of high follower charisma experience and low follower charisma experience. However, a high context for learning and an effective leader appear to be a good substitute for the charismatic leader since no significant reduction in the already low variance was found.

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ENACTING FLEXIBILITY IN PRACTICE:  
A CASE OF GEOGRAPHICALLY DISTRIBUTED SOFTWARE WORK

Hyun-Gyung Im, Program in Science, Technology, and Society, Massachusetts Institute of Technology, hyun02@gmail.com

ABSTRACT

In this paper, I examine how the members of a distributed software development team (LC) operating entirely virtually for four and half years developed useful social practices to enact “flexibility.” Based on various communication data from LC and interviews, I analyze how LC members experienced, used, and managed their time. I show that “temporal flexibility,” often mentioned as key advantage of virtual organizing, is socially accomplished through “collective boundary management,” as members negotiate different temporal boundaries and learn and adapt to others’ temporal patterns. Flexibility in LC was socially accomplished through mutual adjustments, negotiations, or sometime conflicts among members. Evidence from this paper strongly suggests that research should extend its analysis to how work actually gets done to properly understand the connection between work and temporal structures in groups and organizations.

INTRODUCTION

Distributed (or virtual) teams are groups of people with a common purpose who carry out interdependent tasks across locations and time through technological mediation (Lipnack & Stamps, 1997; Maznevski & Chudoba, 2000; Townsend, DeMarie, & Hendrickson, 1998). The possibilities of distributing work across time and space have been the subject of growing interest. As traditional workplaces are transforming into virtual workspaces or “techno-territories” (Schwarz, 2003), the notion of working “any time, any place” has become a reality for many people. Despite the popular belief that technological advances would bring the “death of distance” (Cairncross, 1997), prior research has repeatedly reported that distance poses significant challenges to distributed teams. Distributed teams are observed to experience difficulties with insufficient context cues, feedback delays, and long interruptions in communication that impede members’ capability to interact, share information, and establish mutual understanding (Kraut, Lewis, & Swezey, 1982; Sproull & Kiesler, 1986; Straus & McGrath, 1994). Virtual team members are often found to fail to share information about their local contexts or detect differences across locations, resulting in damage to coordination and interpersonal relationships (Cramton, 2001). Virtual teams also struggle to span multiple time
zones to synchronize their efforts, and temporal coordination takes on heightened salience (Massey, Montoya-Weiss, & Hung, 2002; Massey, Montoya-Weiss, & Hung, 2003).

While learning much from the existing research on virtual teams (Lipnack & Stamps, 1997; Markus, Manville, & Agres, 2000; Massey et al., 2002; 2003; Maznevski & Chudoba, 2000), I found it limited for two reasons. First, by framing “virtual” as a context that lacks qualities of the collocated environment (e.g., face-to-face interactions), many researchers focus primarily on the constraining aspects of technological mediation, leaving out the actual practices of distributed workers through which they create a shared context for collaboration. Second, much of the research is based on short-term teams whose work context and task differ significantly from those teams working on real-world projects (for exceptions, see Im, Yates, & Orlikowski, 2005; Panteli, 2004; Yoo & Alavi, 2004). As it takes time for team members to learn how to effectively collaborate in a distributed situation, short-term research might miss important team processes that can only be revealed through a long term observation, such as the very process of developing useful practices over time.

To understand what virtual team members actually do to structure and coordinate their dispersed activities, more longitudinal research on virtual teams in their “natural habitat” is needed. In this paper, I attempt such research in an empirical study of a virtual team that shifts focus to the actual practices of organizational members over an extended period of time. In other words, I report how the popular vision of working “anywhere and anytime” is materialized in a particular virtual team that operated almost entirely virtually over 4 years. In particular, my main interest lies in the simultaneous reconfiguration of time, communication, and work in distributed situation. How does organizing work in a dispersed way change the way people perceive, use, and manage time? To answer these questions, I examine the ideas and vision members brought with them when they set out to work in distributed mode, the strategies they used to actualize this vision, and how their everyday practices supported or conflicted with their vision. It will also bring to the fore the different local contexts in which members were embedded, the multiple structures members devised to organize themselves and their work, and the shared practices members developed to bridge the differences and stay connected.

In what follows, I first introduce the site and method of this study. Then, I examine the perception and practice of time in LC using LC’s communication and interview data. I show that the dominant ideas and discourses of new temporality, often represented under the banner of temporal flexibility, were also present in LC, but I also argue that the “actualization” of the ideas involved the interweaving of heterogeneous elements and practices. In other words, I report how “flexibility” was socially constituted and achieved by local practices. Then I conclude by summarizing the findings and discussing their implication for future research and practices in distributed work.
SITE AND METHOD

Site: Little Company (LC)

Established in 1996, Little Company (LC) is a small, primarily self-funded, software start-up company, developing a new programming language product, the LC system. The first functional product was developed about one year after the company was founded and the team continued to improve and market the system in the three subsequent years.

The company was originally formed by four computer scientists, and the fifth member joined soon after. Of these five members, three (Keith, Robert, and Dan) worked full time, developing the product and company strategies. The other two (Fred and Martin) worked part time until mid-1999, attending to marketing and administrative matters while doing a small amount of coding.

The members were dispersed geographically in four different cities and temporally in three different time zones across the US. Dan and Keith lived in the Eastern Time Zone, in two different states but within a day’s driving distance. Robert lived in the Mountain Time Zone, and Fred and Martin in the same metropolitan area in the Pacific Time Zone.

Although they were geographically dispersed, there were multiple existing interpersonal ties among the members of this company: three of the members—Dan, Keith, and Fred—had gone to the same college for graduate degrees; Dan and Keith were friends and had written research papers together; Keith and Robert were friends and colleagues at a company prior to joining LC; and Fred and Martin, who had worked together many years ago, were friends who lived in the same city.

This virtual company had no central physical location, and its central computer server was located at a regional ISP in a town near the home of one of the East Coast members. The three full-time members worked from home and the two part-time members worked out of private offices, using their local computers. Finished and tested components were periodically sent through the Internet to the central server where they were merged together.

Due to geographic dispersion and financial constraint, LC’s primary communication media were electronic mail and telephone, with rare face-to-face meetings as a “byproduct” of personal trips. LC never had a team-wide face-to-face meeting during the time the company was in operation. Keith did not meet Martin until after the period covered by this paper, and to this day, Dan and Robert have never met Martin.
Data and Method

The approach of this study was exploratory and inductive (Struss & Corbin, 1997). The initial data available was LC’s email archive. Semi-structured interviews of LC members were conducted at various points to understand their work, communication, and temporal practices. Later, the data collection and analysis expanded to include the minutes of their regular conference calls and phone records. Altogether, the data I used in this paper comes from four sources: LC’s email archive, the conference call minutes, phone records, and interviews. Table 1 summarizes these data sources, and the details are explained below.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email messages</td>
<td>11,803 messages (Jul 1996 – Dec 2000)</td>
</tr>
<tr>
<td>Phone records</td>
<td>10,149 phone calls (Jul 1997 – Nov 1999)</td>
</tr>
<tr>
<td>Interviews</td>
<td>7 interviews, average length of 1 hour</td>
</tr>
</tbody>
</table>

The email archive included all of Dan’s received and sent emails, supplemented with messages saved by the other full-time members between July 1996 and December 2000. The final archive (11,803 messages in total) captured most of LC’s email activities since the members typically sent their messages to the entire team. The distribution of messages by sender and year is shown in Table 2 and monthly distribution of emails over 4 years is shown in Figure 1.

<table>
<thead>
<tr>
<th>Sender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Year (GMT)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan</td>
<td>3685</td>
<td>31.2</td>
<td>1996</td>
<td>64</td>
<td>.5</td>
</tr>
<tr>
<td>Keith</td>
<td>3588</td>
<td>30.4</td>
<td>1997</td>
<td>3234</td>
<td>27.4</td>
</tr>
<tr>
<td>Robert</td>
<td>3348</td>
<td>28.4</td>
<td>1998</td>
<td>3352</td>
<td>28.4</td>
</tr>
<tr>
<td>Martin</td>
<td>582</td>
<td>4.9</td>
<td>1999</td>
<td>3355</td>
<td>28.4</td>
</tr>
<tr>
<td>Fred</td>
<td>346</td>
<td>2.9</td>
<td>2000</td>
<td>1798</td>
<td>15.2</td>
</tr>
<tr>
<td>Other</td>
<td>254</td>
<td>2.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>11803</td>
<td>100.0</td>
<td>Total</td>
<td>11803</td>
<td>100.0</td>
</tr>
</tbody>
</table>
LC members used two-way or three-way calling heavily in their daily work. The phone bills collected from the three full-time members provided access to the basic information about phone communication in LC between July 1997 and November 1999, including the caller, the called, the date/time of the phone call, and the length of the phone call.

LC members also held regular telephone conference calls, monthly in 1996 and weekly beginning in April 1997. During these conference calls, typically running from 45 to 90 minutes, LC members discussed and made important business decisions, coordinated development activities, and assigned tasks to each member. During each meeting, Robert wrote one to two pages of notes, although they were kept for reference and not regularly distributed to the other members. These handwritten “minutes” for 192 meetings held between August 1996 and December 2000 transcribed for research include information about the date/time, people present (or absent), and the key points discussed during the call.

Four of the members of LC were interviewed, omitting only one part-time member (Martin) who had left the team fairly early in its existence (Nov. 1998). Each full-time member was interviewed individually as well as together in a group interview. Interview topics included the history of the company, team members’ backgrounds, technologies they used, their communication, work and temporal practices, their local contexts, etc. Ray, who was hired after the period of this study as CEO to market LC’s product, was also interviewed once and provided his observations of LC’s work practices from a marketing perspective. Also, the spouse of one of the full-time members was interviewed and provided a valuable account of her experience from the perspective of a home-worker’s family. All of the interviews were semi-structured and about
an hour long. In addition, one of the full-time members was accessible throughout the study, serving as a key informant, allowing follow-up inquiries and discussions.

Each data source offered a particular view of LC’s communication, work, and temporal practices. The email messages and meeting minutes provide contemporaneous records of communication. The phone records help understand patterns of synchronous communication and coordination. The interview transcripts provide first-hand account of members’ work experience.

The data sources were analyzed in multiple ways. The qualitative analysis included reading and coding email messages, reading interview transcripts and meeting minutes multiple times, and doing thematic content analysis. The quantitative analysis, using basic statistical techniques, was also done to explore and identify patterns in LC’s communication.

**FLEXIBILITY: PERCEPTION AND PRACTICE**

While we use the term ‘flexibility’ very often, its meaning is not always clear. Researchers have pointed out the difficulty of defining flexibility, since flexibility is multi-dimensional (Suarez, Cusumano, & Fine, 1995) and polymorphous (Evans, 1991). Flexibility has different meanings in various contexts colored by the particular situations or problems faced by organizations. I do not attempt to provide a single definition of flexibility. Rather, I use the term broadly as meaning “capability to adapt” and focus on how this multifold concept was interpreted and put into practices in terms of “time” in LC. In other words, it is temporal flexibility, “the capability to adapt which and how many hours one works in the face of new, different, or changing requirements,” that I mostly refer to when I use the term flexibility in this paper.

Since the 1970s, many employers have gradually adopted a variety of programs to provide employees with more control over their time. A puzzling paradox is, however, that employees take little advantage of those programs all the while they wish for less work and a greater control over their use of time. This paradox is usually ascribed to the normative pressures of organizations, the kind of rules and policies that reward working long and inflexible hours (Barker, 1993; Kunda, 1992; Perlow, 1997). Some go further to contend that people can escape these pressures and regain temporal control by leaving permanent employment for market-based careers (Arthur, 1994; Kanter, 1989; Pink, 2001). However, even contractors are reported to take little advantage of flexibility they believed they had. Contractors usually worked longer hours than when they were permanently employed and continued to maintain rigid schedules (Evans & Barley, 2004).

To explain why contractors rarely limit their hours or schedule their time more flexibly, the following explanations have been proposed: First, the majority of contractors seek to minimize...
downtime as they see it as a period without pay rather than a period without work. Second, the practice of billing by the hour leads contractors to equate time with money, thus working longer hours for more money. Third, contractors are typically hired into troubled projects at the last minute and this situation exacerbates their proclivity to work long and inflexible hours. Finally, many contractors put in long, even unbillable hours to ensure solid references and referrals for future contracts. Evans and Barley conclude that contractors revealed a disjuncture between perceived and realized flexibility similar to that found among employees in organizations with flexibility programs (Gareis & Barnett, 2002; Tausig & Fenwick, 2001).

LC members occupy a distinct position, differentiated from both permanent employees in collocated organizations and free agents, which offers an opportunity for an interesting comparison. Should a similar disparity exist in LC, where members univocally claimed flexibility and control over their time as the core of their temporal norms and standards? To answer this question, it is necessary to distinguish between perceptions and actual practices of time and pay close attention to how LC members experienced, interpreted, and allocated time on a daily basis.

Nevertheless, a couple of scenarios can be delineated in advance. First, LC was above all a self-managing team where the bureaucratic control and normative pressure of organization was almost absent. LC members were largely free from the hierarchically based social relations that might force software engineers elsewhere to work long and inflexible hours. For example, Perlow (1999) documented that the cultural norms and accompanying reward structures of the organizations encouraged engineers to comply and be reluctant to take advantage of flexible programs. Cultural norms define how individuals are expected to respond in different circumstances. If LC had a set of different cultural norms, free of pressure for long and rigid work schedules, then LC member might have actually taken better advantage of temporal flexibility with higher control over their work time.

Second, in contrast to free agents whose relation with the hiring organization is only temporary, LC members identified themselves with the company and envisioned their future career as related to the outcome of this project. From this identification, two different conjectures can be made. On the one hand, with one of them as the founder and president of the company, LC members were not exposed to as much market-based pressure as the contractors, so they might hesitate to voluntarily limit flexibility. Although time was still money for LC members as the window of opportunity to sell their technology was rapidly closing, the simple fact that they were not “billed by the hour” and that they did not have employers to impress may have made the equation less conspicuous. On the other hand, because their engagement with the project was not partial in terms of time commitment, scope of work, and responsibility as was often the case with
contractors, LC members may have ended up working longer hours to move the project forward than they initially expected.

LC members firmly believed that they could establish more flexible temporal norms and structures. Nevertheless, the change is likely to be more complex, not just because flexibility is an elusive concept often meaning different things to different people, but also because they had to come up with useful practices to support it as a team. Did it happen at all? Then how did it happen? Was their idea of flexibility in line with their actual practices or did they experience slippages and contradictions? These are the questions addressed in the subsequent sections.

HOW MANY AND WHICH HOURS DID THEY WORK?

Working from home interacting with other members in remote sites through technological mediation changes many things in one’s life. None of LC members had prior experience of working entirely from home, and now the three full-time members worked out of home everyday. Suddenly, certain habits and routines members had previously formed in the traditional office environment lost their relevance. Some of them were dismissed with little regret, as illustrated by one of the full-time members during his interview:

Think about how much time you waste driving...that’s a free hour everyday potentially. Eat when I want to. If I play music, play whatever music I want to. You don’t have to be dressed. You don’t have to worry about some idiot telling you can’t go barefoot. We don’t ever have to worry that much about day care coverage or kid coverage or anything because, in a pinch, I’m within walking distance of day care and the school.

Now, he could eat at any time he wanted, but also gone were the lunch breaks with team mates to chat and refresh. One of the important dimensions of these habits and routines is temporal. Distributed work touches and modifies the ways members experience, organize, and manage time at work by situating them in a novel context. New practices may emerge to replace the old ones, which is often assumed to allow greater temporal flexibility for distributed members.

On the other hand, engineers in general have long been known for the intensity of their work schedules and total devotion to work (Kidder, 1981; Kunda, 1992; Perlow, 1997). Software engineers, in particular, are known for their fast-paced, high-pressured, and crisis-filled work schedules. It has been reported that software engineers have extremely long hours with few boundaries between work and personal life (Perlow, 1998). They were found suffering from “time famine,” a feeling of having too much to do but not enough time to do it, which forced them to work longer hours (Perlow, 1999). The intense and all-encompassing work schedules, so
prevalent and often perceived as inevitable among software teams in the US, however, are far from universal across cultural boundaries (Perlow, 2001). Instead, Perlow argued that it is the ways work is coordinated that perpetuate the work time standards and norms in each organization.

Interestingly, LC members seem to have reached a similar conclusion from their own experience. They considered long hours and total devotion as the consequence of “bad planning and poor coordination,” far from the necessary condition for software development work. The excerpt from a member’s email sent to the rest of the team epitomizes members’ aversion to such an all-encompassing commitment and rigid structure. In response to a merger offer from a major competitor with an employment contract on a project that was clearly indicated to be a real intensive job with lots of long hours, Dan in effect turns it down saying:

*In addition I will not agree to an 18-month employment agreement for anything less than $200,000 per year. I’ve worked for a company that was spiraling in before, and it was awful, and the only thing that could be more awful would be if I had signed some sort of a brain-dead employment agreement that forced me to stay on.*

Above all, avoiding such a work setting was precisely one of the benefits that motivated them to sign up for the LC project. They anticipated and highly valued the flexibility from working in distributed mode.

It is difficult to know how many hours per week LC members actually spent on work. The question was actually brought up in the interviews, but all of the LC members had a hard time answering. “I never, I haven’t really thought of it in those kind of terms,” confided Kieth, for example. Requested to give an approximation, however, all full time members estimated independently that they might have worked “at least” 50 hours a week. This exceeds the baseline 40 hour-week that is generally taken as standard for a full time job. When compared to a few statistics available, LC members’ estimate is longer than the average of their counterparts, both permanent employees and contractors (cf. Hecker, 1998).

Even if we take LC members’ estimate at face value, it is still not all that surprising, considering their status in the professional hierarchy. Each member’s position can be equated to the senior professional level or higher—the level that are reported to have the long and often unpredictable hours of work. Early studies have already found evidence for all-encompassing schedules and blurring boundary between work and life outside of work in those higher in hierarchy (Kanter, 1977; Whyte, 1956), and the long and unpredictable work hours are increasingly prevalent in many professional occupations, especially in those under the banner of knowledge work (Perlow, 1998).
However, I would like to point out that “a fifty-hour-week” has more significance as “symbol” than as measurement. When work is open-ended, creative, and highly demanding, it is hard to standardize or fully plan out the work schedule in advance. In these situations, the quality of work output tends to be regarded as more important than the number of hours each worker puts in to complete the work, which was also the case in LC. The distinction between “productive” and “less (or even non-) productive” time was much more common in LC than between “work time” and “non-work time.” After all, not every hour is the same in terms of “productivity,” as Keith explained in his interview:

*I mean, there are times, you know, I mean like in any kind of job, even when I had the sort of a job that you’re either productive, you know, you go through those phases of weeks or whatever where you’re either productive or not productive or whatever, and then you go through these weeks where you’re very very productive, but I put a lot of hours in.*

The same three hours quantified in clock time is not “qualitatively” the same, depending on the quality of the output. The ramification of this emphasis on quality is not clear-cut, but an interesting connection has been made by Steward (2000) in her study of teleworkers. She observed that teleworkers measured their performance and time use against an optimal hour of work with high-quality output. This new type of calculation measured against an idealized standard, Steward argued, drove teleworkers to work longer hours in order to compensate for any shortfalls from that standard. Could LC members find themselves in a similar situation?

Although conclusive evidence is hard to find, a close examination of their email communication provides some clues. Some emails voice members’ concerns about “productivity” and offers to put extra efforts over the weekend to bridge the gap. Consider the following example:

*I’ll think about this a little more; it has taken altogether too much of my time today. I intended to have the register numbering mostly done, and it is not.*

In this email, Dan is pulling himself out of a technical discussion with Keith, worrying about the delay of his own work. To this, Keith replied sympathetically:

*I understand the feeling.*  
*I am behind on the rest of the assembler.*  
*I will be in and out this weekend so give me a call or send mail if you want to talk.*

In a separate email later on the same day, Keith also wrote to Robert:

*I, at least am far behind my schedule. I hope to have the assembler running this weekend.*
Robert, who was usually the most meticulous among the three, was not an exception in getting behind the schedule occasionally. In the email below, Robert describes vividly the various distractions—the machine change, visitors, even a strangely behaving cat—that had prevented him from being productive:

Subject: status

The past week was not a productive one for me. I’m still trying to get my NT machine back to where it was before the great machine swap. The packing peanuts are all cleaned up and most of the boxes are back in the truck awaiting a trip to UPS. I believe I’ve run out of new york visitors to take on cross country ski trips. The cat is acting normal again.

I’m still working on the fix that builds a guaranteed-to-be-correct set of .scm files. Hope to have it done in a day or so…and return to working on gc for large objects.

Whereas members’ concern about not being productive enough surfaced from time to time in their email communication, they did not talk explicitly about the opposite situation. As long as they were on schedule, the results stood for themselves. However, it is hard to imagine, and even harder to find direct evidence that LC members would take it slow and relax a day or two if they had exceeded their own standards. The impressions from email data and interviews suggest that they probably just moved on to the next task on their list:

*The three of us were all competent. We can all work pretty hard. Well, we were always the people who are working on it 100%.*

Considering this, LC members might have worked more than they would actually admit. “I think you pretty much just work as hard as you can at a sustainable rate,” commented Dan in the interview. Then, the “fifty-hour-week” can be interpreted to stand for that “sustainable rate” at which they thought they could stay both committed and productive for a long period of time:

*I don’t know that it was significantly more than 50 hours a week. The other thing is, if you’re going to do it, it’s one thing to say oh, yeah, I pulled an all-nighter. You’re not going to pull all-nighters for four years.*

LC members’ involvement with the project was long-term. They might have worked seventy or eighty hours per week at hectic times (e.g., when important deadlines, such as public release, approached), but they were all aware that working long hours all the time for the entire period of the project would be neither sustainable nor productive. As Dan succinctly summarized, no one
can pull all-nighters for four years. The “fifty-hour-week” estimate is a symbol that reflects the implicit temporal norm and standard that members considered reasonable in terms of productivity and appropriate in terms of commitment, around which they guided and directed their work efforts.

Seen in this light, “fifty-hour-week” is an interesting number. It is more than the standard forty-hour-week of full time workers but less than the seventy-or-eighty hour week often found among software engineers (cf. Perlow, 2001). It expresses the way members viewed themselves, their work, and their life: They were committed enough to work as hard as they could, but they were competent enough not to need to work all the time; They were independent enough, free enough from the organizational pressure to work long hours, but responsible enough to voluntarily put in “a lot of hours anyway”; work was one of their central interests, not one rung on a career ladder for which to sacrifice other interests and responsibilities in their life. The “fifty-hour-week” is the number that epitomizes their identity as professionals and individuals.


![Daily temporal pattern in email communication](image1)


![Weekly temporal pattern in email communication](image2)
On the question of which hours LC members worked, the interviews and communication data indicate that LC had no preset office hours and members worked flexible and fluid hours. An analysis of temporal patterns in LC email communication reveals that all of the three full time members worked outside of the “nine to five” conventional office hours or the “five day week” (Figure 2). Over the 54-month period, about half of all messages (45.3%) were sent outside of the 9 am to 5 pm time frame, with 33.2% of emails sent between 5 pm and midnight. The most active block of time included the morning hours of 9 am to 12 pm, and the next early afternoon hours of 12 pm to 3 pm. The weekly pattern of email shows similar results (Figure 3). Some (14.9%) were sent over the weekend, while the rest were evenly distributed across the five weekdays.

Seen individually, there are noticeable differences among members in their temporal patterns of communication. Among the three full time members, Robert typically started his day first and tended not to stay too late, whereas Keith typically started later but worked until very late. Dan’s pattern shows the most visible fluctuations by hour, with peaks in the morning and early afternoon, and a consistent decrease toward evening. He also worked the most during the night time. The difference stems from various factors, such as personalities, habits and media preferences, but the most decisive seems to be their different family situations and responsibilities: Dan was the husband of a working wife and father of three young children; Robert had a working wife but no children; Keith was not married but had a girl friend who lived in the same city. Among them, Dan was the one whose daily work schedule was most affected by his regular familial responsibilities: several days a week he had to be a “morning chauffeur” and “drop kids at schools”; he also had to “pick up kids and run them around” in the afternoon,
and “get them to bed and read the stories” at night. Dan’s day would be different depending on the schedules of other family members, for example, whether it was during the school days or whether it was one of the days of the week when daycare was available, or whether it was the day his wife needed a ride to her office. Hence, he typically started his day pretty early (7 to 7:30 am), but he “often did not start to work until 10 in the morning” and “did not do as much in the evening” (see the hours of 3-8 pm in Figure 2). Instead, he had a longer day than the others, staying up late (9 pm to midnight) and working safely outside the reach of “three curious children.” For Robert and Keith, this kind of “distraction” was little problem, simply because they did not have family members at home during the day to interfere with their work.

The high degree of temporal flexibility in LC is also reflected in members’ portrayals of how they structured their day. All three full-time members described their day as “unstructured,” or “loosely structured” according to “what they had to do” on a particular day.

In flux Robert said not only his office but also his general work environment was always “in flux”:

Things change as time goes on. But I’m not an orderly person in the sense that...that my desk is rarely clean. And if it’s clean, it’s only, you know, things start accumulating [LAUGHTER] and stacks of stuff in my office. I like to play around with all sorts of tools and mechanical things...And I’ll often just have something sitting in my office that I will play with when I’m thinking about other things. And then, I just set it on the floor and then something else comes in. Pretty soon, the floor is completely covered with things that I’ve been playing with. As a matter of fact, I start tripping over them and [LAUGHTER] OK, it’s time to put things away and. But OK. So, that’s kind of my office environment. But my work environment, kind of the first thing I do in the morning is just kind of look at the massive quantities, email, that we get and I have to sort through and just kind of decide is if there is [some]thing that I have to deal with right now. Are there any disasters going on, any new stuff that, you know, somebody found a bug that is something that I should be fixing. And so, I kind of go through that and decide whether there’s something there that’s going to really change what I thought I was doing today. And then, after I’ve taken care of that, then it’s kind of back to remembering, OK, now what was I going to do today? And I mean, we have telephone meetings that we try to do weekly and so forth. So, if I have something like that on my horizon, I do whatever I need to do to prepare for that. If there’s something that I said I was going to do that I should just do and get off the plate, then I should do it before the meeting, I do that. But for the most part, I’m extremely unstructured.

Going by spells For Dan, who had to juggle work and family responsibilities on daily basis, a work day was fragmented by various activities, which, in Dan’s words, went by spells:
I honestly don’t know [how many hours/week I worked] because I know my time is broken up. I don’t get started right smack-dab at 9 AM. I often don’t get started until 10. Some days a week, I can work cleanly until five, but especially during the school year, we’ve had kid problems…Picking people up and running them around and doing stuff. Then, I would work in the evenings and sometimes I would work part of the day Saturday and part of the day Sunday…I think that it goes by spells.

**Working on a walk**  Keith’s description of his work day sounds less hectic than Dan’s, interweaving two different kinds of activities—working and taking breaks—at the same time, but he also had high discretion as to how to spend his time:

I will get up between 8:00 and 9:00 in the morning, and I will essentially start working in the morning, and I’ll work, I’ll work and I’ll take walks, sort of intertwined between the two, because I actually do, I actually know what I’m going, I actually sort of play out in my mind, when I’m taking a walk, what I’m going to do for the next hour, and then the rest of it is just typing it in…Yeah, but I’ll take two or three, you know, couple of mile walks a day…if weather [is good], places around my house where I can do that. So I will just sort of interweave working and, working and walking, and then, you know, and then be at home when I need to be at home, if I need to talk to somebody or whatever. But I’ll then work until about 1:00 in the morning, too, you know, and you know, on the other end of that. Now that doesn’t mean that I’m really putting in that long of a day because I’ll, there’ll be breaks and there’ll be other stuff that happens in the middle of the day.

LC members had a high level of “operational flexibility” (Bailyn, 1985), to adapt their work schedules daily or even within a day according to changing situations. Once members divided work and agreed upon general deadlines for a list of tasks, members directed their efforts around those guidelines (thus with limited strategic flexibility for individuals to change their commitment to those general task schedules and plans), but they were free to decide how to allocate their time on daily basis to get the tasks done as long as they delivered high-quality code on time.

The following email exchanges among LC members capture how a work day of each member unfolds differently depending on the local exigencies. Dan sent a message about the local weather and the problems caused by it, and Robert wittily reacted to it asking whether LC had snow days:

**From:** Robert
**To:** all
**Subject:** Re:fyi
Dan wrote:
> In case anyone is wondering, we just had a shitpile of snow. Keith's power is out, and my ISP is
unusually hard to reach.

Does LC have snow days?
--
robert

To: all
From: Dan
Subject: Re: fyi

Robert wrote:
> does LC have snow days?

Don’t think so. It picked a good day to snow; I made a couple of small fixes to instruction-form selection,
and have been testing them while I shoveled snow.

For reference, a “shitpile” is somewhere between 18 and 24 inches, packed. A pine tre in the yard next
door broke off about 12 feet off the ground, an arborvitae in another neighbor’s yard removed itself, roots
and all, from the ground. Down the street there’s a maple tree with two big branches down, across the front
walk of a guy who’s about 80.
But, lucky us, all our services come in below ground.

Tonight it is supposed to get 20, but tomorrow and the next day it is supposed to be warm.

dan

Without a central office to commute to, snow days lose their conventional meaning, thus
conveying a funny twist when mentioned in this tiny distributed company. Still Robert’s joke
had a point in that the power outage and bad network could be disruptive enough to call for snow
days even in a distributed team. Dan shrugged off this concern, saying “it picked a good day to
snow,” although what really happened was that he picked a good task to do on a snow day. By
working on the task that could be done independently, requiring little interactions with others, he
minimized the disruptive effect on his work. The chosen task also allowed time to shovel the
snow while tests were running on his computer. If flexibility is defined as the capability to adapt
to new, different, or changing requirements, Dan surely demonstrated this capability by working
around the problems.
In sum, LC members had the flexibility of choosing when to work or how many hours they worked on a particular day, but the amount of their work load was probably no less than that of other software teams, if not greater, considering that LC was trying to develop a product with the three full time members that would typically take “a team of five to twenty people.” LC members averaged about 100 lines of code per person each day, which is significantly higher than the industry average (Bassman, McGary, & Pajerski, 1994). In fact, Keith, who was singled out by the other members for working “the hardest of the bunch,” admitted that he ended up working more hours after he started the LC project. He also added however, “that doesn’t mean that I’m really putting in that long of a day because there’ll be breaks and there’ll be other stuff that happens in the middle of the day.” The indifference of members as to the actual number of work hours is closely related to this daily temporal experience. When different activities are interlaced into a work day, some of which are often done concurrently (e.g., running a test while shoveling snow), conventional calculation of work hours loses relevance since there exists no fine line demarcating time that belongs to work from time that belongs to personal activities. The high level of operation flexibility that allowed LC members to structure their work day in accordance to their local situations seemed to compensate the long day. Going some extra miles caused little concern when members could march to their own beat.

FLEXIBILITY AS SOCIAL ACCOMPLISHMENT

Although all of the LC members valued “flexibility,” their assumptions, expectations, and actual practices slightly differed. One way to approach this is examining the different sense of boundary individual members revealed. LC members all experienced changing boundaries between work and life outside of work, as the physical boundary that once separated home and work disappeared. However, each member had a different sense of boundary from the rest, stemming from their local situations, personalities, and work styles. For members who structured their work day with high operational flexibility, however, these differences had to be addressed, negotiated, and managed for effective collaboration. In the absence of formalized temporal structures and hierarchical “boundary control” (Perlow, 1998), LC members had to achieve boundary management as a group.

Embracing Flexibility: Integrating Temporal Boundaries

LC members, in one way or another, all embraced the temporal flexibility allowed by their new work arrangement. Their daily temporal structure was not based on a sequential and pre-
determined schedule, but on fitting different tasks and activities into a day according to the ongoing situation. In this sense, time in LC was “polychronic” rather than “monochronic” using Hall’s (1990) terminology. The following email message from Dan to the rest of team members illustrates this colorfully:

Subject: Getting a slow start

I’ll be back in time for the conference call, but otherwise I’m not going to get much done this AM. James is still sick, Martha has to get in to work briefly to do time-critical crap there, some paperwork has to be delivered to various people, and it has started to snow. So, rather than put stuff off till the weather gets worse, we’re just going to run out and do our errands in a batch. I’ll take reading material for when I have to sit in the car.

Robert, describing his “multiple modes of work,” gives another typical example of polychronic time, but one that sounds more peaceful:

I have multiple mode of work. One is that I’m doing some kind of development work that requires, I mean, I’m testing things, building things that take a long time. Some times, these things take hours. I’ll go [to do] something else. I’ll go mow the lawn. Often I have other stuff that I need to do. You know, dishes are stacking up in the kitchen. I need to do the dishes, and this is the kind of the best time to do them because I’ve thought about all these things. I am going to be able to come back to it and check out and test all these things.

Dan’s email and Robert’s comment illustrate that both of them were blurring and integrating multiple temporal boundaries at the same time. Dan worked while sitting in his car and Robert did house chores while his computer was running a test. The same tasks of building and testing code that are often suggested to contribute to the long hours of software engineers at work for the sheer amount of time they take do not pose much constraint to the flexibility, as members utilized the time doing other stuff. It explains why software developers were found to have the most flexibility among various occupational groups of technical contractors (Evans & Barley, 2004, pp. 27-28), quite contrary to the wide-spread perception that software development work requires rigid and all-encompassing schedules.

In general, it was up to LC members how to use their time across different kinds of activities on a particular day. Sometimes, this decision was opportunistic and emergent; as Dan put it, “if you do sort of get too behind on home stuff, then you might take a break and do that.” Sometimes, it was habitual, such as Robert’s weekly routine of going to garage sales:
Friday morning, Saturday morning, I get on my bicycle with a bicycle trailer, ride around town and buy other people’ junk. And I come back Friday at 9:30, and ten that’s when I start working.

Sometimes, it needed some planning, as Robert describes how he decided to put up a fence one day:

Part of this was spray painting stuff that you had to do four hours [before rain] ... and it rains every afternoon here these months, through the end of June, at about 3:30 or 4 o’clock. And so if you’re going to do something like that, well, you get up in the morning, six o’clock, you get prepared, you get the stuff done by 10, and then you go to work.

They did not have to “report” to other members if they left for a few hours to attend to personal issues such as automobile maintenance, a dentist’s appointment, a child’s school concert, or a garage sale. A simple notice sufficed in most cases. There was no set limit on the number of personal days that individual members might take and members had few restrictions in choosing their vacations, although they would give at least a week of advance notice to coordinate. Even in rare cases where members gave a very short notice or failed to inform others in time, absence from work to accommodate urgent demands outside of work was well tolerated and approved on an ad-hoc basis.

Embracing flexibility involved members’ willingness not only to accommodate demands outside of work but also at work. Before deadlines, members worked longer hours together to get the system ready. They also willingly adapted their schedules to help other members. In case they were away or unavailable for any reasons, they would follow up at their earliest convenience. In the following example, Robert sent an email to Keith very late, around 1 a.m. in Keith’s local time, soliciting some advice:

To: Keith
Subject: still up?

Are you still up? I’m having problems with crashes in ControlFlow.BasicBlock.getSuccCount where it expects the BasicBlock field ‘target’ to be non-null. How do I find out what s-expression is causing this BasicBlock to be generated?

robert
It was a Saturday night, and Keith was away from email. But he replied the first thing in the morning, in a message composed entirely of a subject line, “I am around now, if you are there,” to which Robert responded right away with a brief message of “Yes, I am here.”

Members also used personal occasions as an opportunity to meet other members or attend business in that area. As a self-funded start-up company, LC had little time and money to afford face-to-face team meetings. Rather, members used personal trips to meet other members in the area. “If I was going to be in California anyhow, then I would try and meet with Fred. If we were driving south and passing through [the city where Keith lived], we might stop and meet with Keith,” described Dan in his interview. Part-time members, who committed their time to both LC and the other job, blended not only personal and work time but also the time they spent on different jobs. Fred’s email below illustrates this well:

Date: Fri, 15 Aug 97 18:08:33 PDT
From: Fred
To: LC
Subject: trip to east coast around 11 Oct

Gentlemen:

I will be traveling to the northeast (city A and city B) around the weekend of 11 October 1997. This was originally planned as a mini-vacation for my wife and I to visit friends and relatives in the city A area but I have made plans to visit some [his other company’s] customers in city B for a day or two and I will be driving up…to talk to Keith about some questions/problems in some of the LC-generator code that he would like to get cleaned up.

I tell all of you this just in case anyone can think of anything else that I could do on behalf of LC while I'm in the area; e.g. prospective customers to try to contact, consultants to interview, a really cool trade show we should send some one to, ...

I really hope there is nothing else that needs doing, but I do **not** like spending time on airplanes, and so long as I am going to do it anyway it may as well be as productive as possible.

regards..fred

Fred was going to spend a weekend in east coast for a family vacation, but decided to extend his trip to meet customers of his own company as well as Keith who lived in the area nearby. At the same time, he was also soliciting ideas for other possible tasks that could be done for LC during
his travel. This example colorfully shows how multiple temporal boundaries interpenetrated each other and integrated into members’ daily work and life.

**Limiting Flexibility: Establishing Temporal Boundaries**

While LC members enacted temporal practices that blurred traditional temporal boundaries, they also tried to construct some limits to the flexibility. To be truly flexible, work time should be bounded, not boundless. The same was true with home time. To be productive, members had to reestablish some boundaries between work and home. The ways of creating bounded time varied. Sometimes, members required “quiet time” (Perlow, 1997) by making themselves unavailable for a certain time of a day or by restricting the media through which they could be contacted. For example, on one of those extremely hectic days before an impending product release, Martin sent around an email message before six in the morning (Pacific Time) to ask advice on a technical problem. At the end of the message, however, Martin added a caution not to call him until 7:30 in the morning:

```
Date: Thu, 29 Jan 1998 05:54:03 –0800
To: All
Subject: what does it mean?

I got it yesterday (source code as of Tue evening):

Possible problems:
[...]
Before I try to jump on this, I’d like to ask you to look at the stack trace and help me determine possible cause for the null pointer.

Martin

PS. Please do not call me yet, if you need to talk to me, my family would “kill” me if I awoke them at this time. You may call me after 7:30 AM PST.
```

Sometimes, members wanted to step away from work completely for a certain period, for example, during a family vacation or a personal trip. However, the way and degree of (re)establishing boundaries differed by individual members. Robert compared his style to Keith’s in the interview when he described his bike vacation:
I do these [bicycle] trips and I am not the person with the cell phone. And this is one way that I just go out and disappear. And Keith is getting better with this but he has this tendency of saying ‘you’ve got to keep connected, you’ve got to find a pay phone, you’ve got to call me.’ Keith will plan a vacation and he was out in Tahoe this spring, and it wasn’t all that different than when he was in his office at home. He would be sending emails, he would be calling you on the phone. We could call him on the phone, that sort of thing...and that’s not my style.

Different from Keith who was always working on the go, Robert did not carry a cell phone, a laptop, or even a watch to enjoy his “leisure time” away from work. Although Robert managed, reluctantly, to make a few phone calls to check in with Keith during the trip, he strongly preferred to be “off-the-hook.”

For Dan, the advantages of working from home for juggling work and family responsibilities were evident. However, the integration of home and work did not always go seamlessly. Working from home introduced changes in daily life not only for Dan but also for the rest of family members. The fusion of work and home leads to the interpenetration of multiple temporal structures that were previously more closely coupled either with home or with work. As “work” has been transformed, the meaning of “home” itself has to be redefined. It requires the home worker and his family members to readjust and realign assumptions, expectations, norms and practices related to work and home, which takes time. Dan had similar problems. While Martha, Dan’s wife, hinted in the interview at her occasional distress from the change her husband’s working from home introduced, saying, “it’s just that he was there all the time,” Dan also experienced some difficulty in the new situation:

Sometimes people expect you to do things that they would not expect you to do if you weren’t there...oh, just can you do this, can you do that, can you remember to do this kind of stuff.

One strategy often found among employees struggling to balance work and life outside work is to physically separate work and home life, what Nippert-Eng (Nippert-Eng, 1996) called “segmenting.” Some home workers have been reported to adopt this strategy, for example, demarcating a part of home as office and sticking to the routines and conventions of the traditional office there (e.g., office attire, office layout). For Dan, who shared his home office in the basement with “three curious kids,” physical segmentation was very limited. Although he had a high tolerance for distractions, he found it often hard to concentrate on his work:

I can work with all sorts of noise going on. [But] I don’t deal real well with someone asking me a question right in the middle of trying to do something. So if the kids are just off playing a stupid game, that’s OK. If they’re asking me questions, then I’m in trouble...You’ve got to get the
kids in the bed. But then they stay up all night and they want books read. I haven’t gotten much work done these last few months in the evening.

Instead of the physical boundary that separates home and work, Dan’s boundary was temporal: bracketing certain blocks of time each day with fewest distractions from the other family members to work. He ran downstairs about 7 AM and just look at the mail to see if there’s anything” before he went off to “do his duty of morning chauffeur”, and he stayed late for work after kids went to bed.

In addition to the boundary between work and life outside of work, members also had to maintain a balance between time they could concentrate on their own work and time they could make themselves available for work interactions with others. Working from home freed members from constant distractions in the office, but it still required daily interactions to coordinate with others. Dan commented on this point, classifying his work into two kinds:

There’re really two kinds. If you’re solving a problem all on your own and you’re really sort of working and you’re not necessarily dealing with anyone...the other thing is debugging and testing...that often requires chit-chat with other people because you’ll find a bug and you’ll say hey, what about this, did you know that and typically, oh, I think this one’s yours.

Members were usually very responsive to the other members’ requests for interactions. However, there were also certain periods during which they were busy with a difficult task that required a high degree of concentration and did not want to get sidetracked. On those occasions they needed quiet time. As Dan put it, “sometimes you would say, oh, I just can’t.”

The influence of interference and interruptions on their own work differed by individual. In LC, Robert seemed to be most affected by such interference, given his work style of keeping things in order:
I am not a sort of person who can do five things at once. If I’m in the middle of a big project and something else comes in that is deemed to be so much more important that I should start working on it, it’s often the death of what I’ve done. And I’m probably the only one like this in the company, but I cannot concentrate on multiple things, multiple complicated things at once without kind of resolving one and wrapping it up.

This difference is also related to Robert’s clear preference of email as communication media, which is less intrusive than phone. In contrast to Keith, who used phone more frequently to discuss technical problems on daily basis, Robert preferred to get most information by email to minimize random interferences:
Keith wants to pick up the phone and talk to you. He leaves telephone messages that say call me. I would prefer that I get an email message saying call me about such-and-such or here’s the problem, three sentences, call me and let’s figure out what to do with this.

Negotiating Flexibility: Flexibility as Social Accomplishment

As shown so far, it took time for LC members to establish their own temporal structures situated in a new context, which involved both blurring and establishing temporal boundaries. In the meanwhile, they had to learn about others’ temporal boundaries to effectively collaborate. Individual flexibility was one thing, organizational flexibility was another. Left unaddressed and uncoordinated, the former could hamper the latter. Flexible organization of work as a team required negotiating individual flexibility enacted by members, which I call “collective boundary management.”

The episode in which Robert succeeded only partially in his attempt to “go out and disappear” illustrates conflicts and negotiations around different temporal boundaries and expectations. Robert recalled the incident in the interview, calling it “a total fiasco”:

Three years ago, I bicycled to Oregon for a family reunion. So, I had this fairly straightforward schedule. I needed two weeks to get there. And I needed two weeks to get back. Well, Martha [Dan’s wife] was pregnant at that time and Keith wanted me to do the return trip after the baby was born because Dan was going to be less accessible then, so we could get some stuff done in this period before the baby. Well, I didn’t want to do this. But after about a week, in the middle of Wyoming, I called Keith. Keith insisted that I call him every couple days. And I said, ‘Keith, it’s really hard to call’. And he said, ‘well, why can’t you just stop at a pay phone’. I said, ‘you do not understand Wyoming’...And I am talking to Keith and I say, ‘OK, I will change my plans’. He said, ‘we’ll fly you back.’ And I said, ‘OK, buy a round trip ticket for me...leaving on such-and-such a day, returning on August 1st’. So, I left my bicycle out there and flew back. Well, it was a total fiasco because Martha had [her baby] early, and it was just totally worthless in terms of what Keith had hoped that would happen. And I ended up coming back in this really hot period of time, in the middle of august.

Although Robert was officially on vacation, he made several compromises to accommodate the team’s need. During that time, LC members were busy with writing a big module, a huge task that was added to their development project unexpectedly, adding four times as much code to their system as they had originally planned to write. As it was not included in the original plan, all of three LC members “picked chunks and worked on them,” as Dan put it in the interview, which required a close collaboration and coordination among the three. In addition to the
increased time pressure this new task added to the development schedule, Dan was expecting a baby soon and Keith wanted Robert to delay his return bicycle trip until the birth of Dan’s baby so that Robert’s unavailability would have the least affect. Reluctant to have work constantly flowing back into his vacation, Robert finally decided to suspend his trip and flew back to assist the team.

The episode around Robert’s bicycle trip clearly shows the negotiated nature of flexibility. It also indicates that each individual LC member necessarily needed the understanding and cooperation of others to organize his own time more flexibly and effectively. LC members seem to have learned this very quickly, and it is reflected in their communication practices. For example, Robert explained that he used different approaches to communicating in accordance to each member’s different local situation, communication style and media preference:

*If I want to ask Dan a question, I will send him an email because I know there’s certain period of times when he’s giving kids baths, he doesn’t want to talk, he’s doing dinner, he’s gone to pick up his wife...I may call and leave a telephone message if it’s something that I really can’t write down very well. But more than often, I will send an email message if I have a problem where I have like a stack trace on my screen of something that didn’t work and died, I will put that into email and I will send it out, usually to everybody in the company. And with Keith then, I will call him up and say Keith, I just sent out a stack trace of a problem, you should take a look at it and tell me where you think the problem is.*

As suggested in Robert’s comment, Dan could maintain and take advantage of the flexibility to juggle his work and family responsibilities, because other members were aware of, respected, and supported his temporal rhythm that was very different from their own. This clearly demonstrates that temporal flexibility cannot be properly discussed or evaluated by focusing solely on individuals. Only when seen as a social accomplishment, can the ways that people cooperate or negotiate to enact more effective temporal structures, be properly addressed and understood.

Ample examples can be found around coordinating phone meetings in LC. LC had regular weekly phone meetings, but there were occasions when an additional meeting was proposed or a schedule change was requested. An analysis of 264 emails sent to coordinate a total of 83 phone meetings from 1997 to 2000 revealed that these requests were accommodated in most cases. Table 3 shows that members succeeded in scheduling 12 additional meetings out of 16 requests (75%) and rescheduling 30 out of 31 meetings (96.8%). A close reading of emails revealed that it was Dan’s family-related schedule conflicts that triggered the most rescheduling. Out of 23 meetings where the source of problem was able to be identified from the content of emails, Dan’s situation accounted for 11 cases, of which members managed to reschedule 10 cases.
Juggling responsibilities at home with work, Dan was also the one who requested last-minute schedule adjustments most (Figure 4). Among the 83 cases, 18 cases were triggered by an email initiated on the same day the meeting was originally scheduled. Among the emails requesting last minute changes, 9 (47%) were from Dan. Overall, last minute requests to change meeting schedules were tolerated, and members tried to accommodate other members’ situations. In fact, that was precisely how Dan managed to participate in most phone meetings, in spite of all the constraints. He only missed 4 meetings out of 181 phone meetings from 1997 to 2000. Behind this almost perfect attendance record was the other members’ accommodation to Dan’s effort to bridge multiple commitments.

### TABLE 3 Main purpose of coordination through emails regarding phone meetings

<table>
<thead>
<tr>
<th>Main activities</th>
<th>N of cases (meeting)</th>
<th>Percent</th>
<th>N of cases with actual meeting</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling a new meeting</td>
<td>16</td>
<td>19.3</td>
<td>12</td>
<td>75.0</td>
</tr>
<tr>
<td>Rescheduling a meeting</td>
<td>31</td>
<td>37.3</td>
<td>30</td>
<td>96.8</td>
</tr>
<tr>
<td>Canceling a meeting</td>
<td>2</td>
<td>2.4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Announcing a meeting</td>
<td>4</td>
<td>4.8</td>
<td>4</td>
<td>100.0</td>
</tr>
<tr>
<td>Confirming a meeting schedule</td>
<td>14</td>
<td>16.9</td>
<td>10</td>
<td>71.4</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice of absence or limited availability</td>
<td>7</td>
<td>8.4</td>
<td>5</td>
<td>71.4</td>
</tr>
<tr>
<td>Agenda</td>
<td>4</td>
<td>4.8</td>
<td>4</td>
<td>100.0</td>
</tr>
<tr>
<td>Phone logistics</td>
<td>5</td>
<td>6.0</td>
<td>4</td>
<td>80.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>83</td>
<td><strong>100.0</strong></td>
<td><strong>69</strong></td>
<td><strong>83.1</strong></td>
</tr>
</tbody>
</table>

**FIGURE 4 Reasons for last minute adjustments**
The negotiated nature of flexibility becomes even more apparent in cases where one person’s flexibility becomes a constraint to another. Robert provided examples while describing the advantages and disadvantages of distributed work:

So, I really do not have, and one of the aspects of a company like this where there’s nobody who you’re going to meet in your office in the morning who’s expecting you to be there so you can talk things out or whatever, I have that freedom. On the other hand, when I run into something and I need some information from Keith and I pick up the phone and call him and he’s on his walks, or Keith wants to get information from me and he knows I’m out running around to garage sales, it can be kind of frustrating. But we live with that.

Robert’s comment revisits a dilemma between control and predictability in a new context. Employees in the modern economy are said to have lost their control over time at work as they moved from the farm to the factory and then to the office (Barley & Kunda, 1992; Edwards, 1979; Owen, 1979; Thompson, 1967). However, this change also introduced the significant increase in predictability that people experienced over the temporal boundary between work and life outside of work. As Zerubaval (1981, p. 166) pointed out, “The very same institutions that are directly responsible for much of the rigidification of our life—namely the schedule and the calendar—can also be seen as being among the foremost liberators of the modern individual!”

If modern employees have exchanged control over their time for predictability in their work lives, various flexible programs can be seen as an attempt to regain the control with some compromise in predictability. When everyone is working fluid and flexible hours, it is difficult to predict others’ schedules, therefore to coordinate. The high level of operational flexibility in LC posed
similar problems. It was important to find a way to sustain some level of predictability without compromising individual control over time. For example, the attempt to increase predictability by checking up with each other every now and then would cause constant interruptions. It will merely replace the demand of co-presence with that of constant availability. The key was to find a viable way to create a shared “temporal map” without hampering individual flexibility.

Creating a shared temporal map of the group helps members plan and adjust their individual schedules. As Reddy and Dourish (2002) pointed out, information about temporal rhythms in organizations is itself an important resource for workers to help them accomplish their work. However, knowing others’ temporal rhythms takes time. In LC, where members enacted multiple temporal structures with high flexibility and autonomy, creating and sharing knowledge and information of others’ temporal rhythms was itself an important part of the learning process. In distributed situations, however, this monitoring cannot be done by looking over the shoulder of colleagues. It is only possible through communication that requires active transmission of information about their status and contexts. Dan described the importance of “checking in” with other members for efficient coordination of work:

Well, you do check in. It kind of depends. If you know that someone’s working on something and they’re going to need feedback from you, then you don’t want them to be stalled. I mean, just in terms of running the company efficiently. You don’t want someone twiddling their thumbs if they would rather be working and they need your help.

Creating and maintaining a collective temporal pattern is another important way to develop the shared temporal map. The weekly phone meeting in LC provides a good example here too. An analysis of the meeting time revealed emerging temporal patterns in LC associated with the weekly phone meeting. Out of 181 meetings held between Jan 1997 and Dec 2000, 71.8% were held on Wednesdays. Figure 5 shows that the proportion of “the Wednesday meeting” remained almost constant across all four years, providing an anchor for organizational temporal rhythms.

**FIGURE 5 Meeting day**
Unlike meeting day, meeting time underwent some changes over the 4-year period. Amongst the 160 meetings for which time information was available, 42% were held at 3 pm EST/1 pm MST/12 pm PST. The second most used time slot was 2:30 am EST /12:30 pm MST /11:30 am PST (22.7%), just 30 minutes earlier than the regular time, with 10 am EST /8 am MST /7:00 am PST
(6.1%) as a distant third. 70.7% of the meetings fell on one of the three time slots. Figure 6 shows the proportion of the three meeting times over the four years. As seen in the graph, the four years may be broken into three phases where each of the three meeting times is dominant, serving as what I call “standard meeting time.”

A shift in temporal structure in organizations usually indicates other changes in organizations, and such was the case in the change of standard meeting time in LC. In the first phase (Jan 97 – Oct. 98), 86% of phone meetings during phase I happened at the stand meeting time of 3 pm EST/ 1pm MST/ 12pm PST. This initial standard meeting time, called “regular (meeting) time” by LC members, persisted for the longest period of time, and was still referred as “regular time” even after the standard meeting time had changed. This time frame covers the majority of LC’s product developmental period, from the start of the project to the release of the beta product.

The brief second phase (Nov. 1998 ~ Feb. 1999) seems to be transitional. 63 % of meetings in phase II happened at this time. It was not accidental that they moved the meeting from the “regular time” to early morning. Dan’s new-born baby affected his daily temporal structure, which already had been complicated by various child care duties. After repeated delays and rescheduling caused by Dan, members finally decided to move the meeting to the early morning. At the beginning, however, this transition was not deliberate. Despite the repeated difficulties, neither Dan nor the rest of members actively sought to change the well-established, more than a year old routine of “regular time.” The change was triggered by Fred’s one-time schedule conflict. In attempt to reschedule the meeting, the early morning time was suggested as a possibility. Dan took this opportunity to inform others that early morning was better for him than the regular time, adding “In fact this is generally a better time than the 3:00 pm call, which can run on into the witching hour.” The other members responded to Dan’s nuanced request right away and they agreed on the new standard meeting time of 10 am EST/ 8:00 am MST / 7:00 am PST.

Nevertheless, the two part-time members missed a few meetings during that period, so LC members sought another meeting time that was not too inconvenient for those on the West Coast. Gradually, a new standard time emerged. Note that, in the later two months of phase II and the earlier two months of phase III, the traditional “regular time” of 1 pm in MST coexisted with the other two standard meeting times. After a few experiments, members finally reached a consensus on the new meeting time, which was only 30 minutes earlier than the “regular time,” but much safer for Dan in avoiding the “witching hour” and much more convenient for members at the other sites. In contrast to the previous one that only lasted for a couple of months, this new standard meeting time lasted almost to the end of the company’s active history, comprising 73% of meetings in phase III. The standard meeting time seems to have lost importance after mid-2000 when part time members left the company. The company-wide phone meeting became less
important by then, since it was just a matter of coordination between the three full time members, who constantly communicated on a daily basis anyway.

Maznevski and Chudoba (2000) found that successful virtual teams had strong, repeating temporal patterns. The weekly LC phone meeting is an example of such repeating temporal patterns which members introduced early and stabilized over time. In particular, the “regular time” of 1 PM in MST was so well established that members were reluctant to change it despite repeated failures to start meetings on time; even then, a few months after the change, it was changed back to one closer to the “regular time.” This example suggests that a temporal pattern that has been established early and lasted a long time tends to be sustained even after it has ceased to be as functional as before, because changing it might well disturb individual temporal structures that used to have been coordinated around the long standing pattern. Anchoring an important organizational event with a specific clock time and a regular weekly cycle created a shared temporal map in LC. It provided explicit and regular opportunities for checking and realigning individual efforts. Moreover, LC’s “regular time” or “standard meeting time” represented the “appropriate time” for activities that required the temporal co-presence of all LC members, which guided the scheduling of any ad hoc meetings or events.

CONCLUSION

LC members’ actual temporal practice does not seem to contradict much their perception that they had high level of flexibility in structuring their day. They had freedom to choose when to work or how many hours they work on a particular day. The amount of their work load was probably no less than that of average software engineers, but the flexibility they enjoyed in allocating their time according to their needs compensated for a long day. The LC members’ estimate of a 50-hour week represents the temporal norms and standards in LC, the level of productivity and commitment that members deemed appropriate for highly skilled technical professionals.

For individual members who worked from home, flexible work first required them to find their own temporal rhythms and structures both to refrain from incessant work as well as to enable consistent work. Keith’s daily walk, Robert’s weekend garage sale visits, and Dan’s habit of working late hours to avoid distractions are a few such routines that members created to structure, order, and regulate their temporal experience. It involved blurring boundaries between various activities that used to be separated into different realms of life, as well as establishing new ones. However, each member’s sense of boundary was different, reflecting their family situations, local contexts, personalities, etc. In the absence of formalized temporal structures and hierarchical boundary control, LC members had to achieve boundary management as group,
which involved negotiating individual flexibilities through which members’ different temporal expectations, interests, and patterns were made visible. Once members learned others’ temporal patterns over time, much of boundary management was done through mutual adjustment without explicit coordination. Creating and establishing an organizational routine, such as LC’s weekly phone meetings, facilitated coordinating flexible schedules of individual members by providing a temporal anchor in LC. Flexibility in LC was socially accomplished through mutual adjustments, negotiations, or sometimes conflicts among members.

Flexibility is, as (Golden & Powell, 2000) nicely put it, “generally believed to be a good thing, but it is never a free good.” It took time and effort for LC members to learn how to put the idea of flexibility into useful practices. Because flexibility for one person can pose constraints to others, individual flexibility does not always benefit collaboration. In fact, this is the main reason why many software teams maintain long and rigid schedules, assuming that software development work itself makes them necessary. The dependencies between modules assigned to individual programmers are often pointed out as ground for the claim that they have to be present at the same time to be productive. However, the very fact that coding tasks can be modularized frees up programmers to work independently, and there is even counterevidence that allowing programmers to set aside a certain block of time to work flexibly actually improved productivity (Perlow, 1999). For a similar reason, software developers were found to work most flexibly among various technical contractors (Evans & Barley, 2004). What these seemingly contradictory findings suggest is that flexibility (or the lack thereof) does not reside in the work itself. Rather, it derives from the innovation in social relations of the people who actually do the work.

Evidence from LC strongly supports that it is not the nature of the work but the perception of what it requires and the practice of how it is coordinated that need to be modified to facilitate flexibility (Perlow, 1999; 2001). It has been recognized that organizational members’ sense of time is influenced by their work (Zerubavel, 1981) and that occupational differences in time orientation exist (Barley, 1988; Dubinskas, 1988b). However, as I pointed out above, different temporal norms and structures exist across groups and organizations that engage in the same type of work (e.g., software development). That suggests that research should extend its analysis to how work actually gets done and coordinated to properly understand the connections between work and temporal structures in groups and organizations.

In a similar vein, the influence of technological mediation may vary across groups and organizations. Recently, researchers have become increasingly aware of the complexity of the relationship between technological mediation and temporal practices in organizations (Steward, 2000; Tietze & Mussion, 2002). Moreover, individuals in the same group can experience time differently depending on their local context. Even for a small team like LC where members were
very homogeneous in terms of task, expertise, professional position, age, and gender, individual members’ temporal patterns varied by their different marital and family situations. In teams and organizations that have more variations in members’ local contexts, coordinating these heterogeneous temporalities and achieving flexibility may become a more complex and difficult task.

REFERENCES


FAMILIARITY BREEDS CONTEMPT: AN EXAMINATION OF THE NEGATIVE OUTCOMES OF FAMILIARITY IN GROUPS

Tracey Rockett, University of Texas at Dallas, tracey.rockett@utdallas.edu

ABSTRACT

This paper is a qualitative examination of the outcomes of familiarity in the workplace. Familiarity has previously been found to have positive outcomes for groups. This paper examines the outcomes of familiarity in the field to determine the range of outcomes. In order to develop an understanding of the effects of familiarity, I conducted a field based, comparative case analysis of four groups - a SWAT team, a film crew, a doctor’s office, and a real estate office. I used group cross case analysis and tree diagrams to identify emerging themes that related to the cognitive element of familiarity. Consistent with previous research, familiarity does produce positive outcomes such as open communication, helping, and socialization. However, I found that individuals also point to negative outcomes of familiarity including arguing, gossiping, and avoidance.

KEYWORDS: Familiarity, Behavior, Groups

Familiarity is an important, yet little understood construct in organizations. It is important because it affects group process and outcomes that most consider essential for an efficient organization, such as the proper use of conflict (Jehn & Shah, 1997), negotiation tactics and outcomes (Valley et al., 1995), and productivity (Goodman & Leyden, 1991). While researchers recognize that familiarity does impact organizational process and outcomes, they have focused primarily on positive outcomes of familiarity such as better coordination (Goodman & Leyden, 1991) and increase information sharing (Gruenfeld, Mannix, Williams, & Neale, 1996; Phillips, Mannix, Neale, & Gruenfeld, 2004). There is a dark side of familiarity that has not yet been explored.
It is important to gain a complete understanding of familiarity because it forms the cornerstone for many complex interactions between individuals. Familiarity has the potential to help explain important aspects of organizational behavior. For example, familiarity can influence many processes in organizations and must often be present in order for individuals to trust one another (Bigley & Pearce, 1998), coordinate effectively with one another (Goodman & Leyden, 1991), and desire to work together (Jehn & Shah, 1997). However, it is possible that familiarity can lead to distrust, create conflict under certain conditions, and decrease coordination. The purpose of this paper is to examine the negative consequences of familiarity. I am interested in answering the following research questions: What are the negative behavioral outcomes of familiarity? And how might familiarity hinder work relationships? I conducted an exploratory field study of four different organizational groups to gain a better understanding of these negative outcomes of familiarity.

This paper presents some new findings for the behavioral outcomes of familiarity. Previous research has shown that familiarity helps in the workplace. For example, Shah and Jehn (1993) found that groups composed of members who are familiar with one another are better able to access and use conflict to their advantage. Other studies have found that groups composed of familiar members are more likely to share unique information than those composed of strangers (Gruenfeld et al., 1996; Phillips et al., 2004). Valley et al. (1995) found that familiarity between negotiators impacts how they negotiate with one another. Goodman & Leyden (1991) found that coal-mining crews with familiar individuals had higher productivity than those with strangers. The data that I gathered suggests that familiar can lead to positive outcomes such as helping and open communication, but it can also lead to negative outcomes such as arguing and gossiping.

**METHODS**

I conducted a comparative case analysis of four organizational groups: a film crew, a SWAT team, a real estate group, and a doctor’s office. I gathered observational data and conducted interviews in order to build the cases. Then I compared and contrasted cases in order to make some inferences about how people think about and use familiarity in organizational settings.

The film crew was brought together to create a major motion picture over a period of about 12 weeks. It consisted of 215 people and 25 subgroups, such as sound department and locations department. Many of the members had worked together on other
films previously because the film community is relatively small and this particular director likes to keep the same crew from picture to picture. They worked intensively, for approximately 14 hours a day, 6 days a week.

The SWAT team is a volunteer group made up of police officers and firefighters. There are 12 members of this suburban SWAT team. The purpose of the team is to serve high-risk warrants and solve hostage crises. Most of the members work together at the police department and they volunteer to work on the SWAT team part-time.

The real estate group is a loosely connected group of real estate and investment companies, most connected through partnerships with the owner of the umbrella company. The purpose of the companies is to buy, lease and/or sell commercial and residential real estate and engage in joint ventures to make a profit for the company. There are 18 people in the core group. They work together for approximately 8 hours a day, 5 days a week.

The doctor’s office is an obstetrics and gynecological office with the purpose of serving the reproductive health needs of women prior to, during, and after pregnancy. The office is made up of 24 employees – 6 doctors and 6 nurses form the core group and the remaining support staff consists of secretaries, technicians, and 2 consulting office managers. They work together for approximately 8 hours a day, 5 days a week. In addition, the doctors are on call several times a month and when on call they work 24 hours straight.

**Data sources**

**Observations:** I gathered observational data from each of the four groups. I spent a minimum of 50 hours each at the film lot, the real estate company, and the doctor’s office and 24 hours at the training site of the SWAT team. During the observational period, I took extensive notes on the environment, tasks, and interactions between individuals. Every evening I recorded these notes, as well as my observations about the day.

**Interviews:** I conducted 63 semistructured and structured interviews. All were audio recorded and transcribed. The interview template used for the SWAT team and film crew consisted of 15 questions. The interview template used for the doctor’s office and real estate office consisted of 14 questions. The second template used for the last two groups was formed as a result of the data gathered from the first template and it was an expansion of the original set of questions, based on methods for conducting inductive research (Eisenhardt, 1989).
Interview questions ranged from the abstract, such as asking individuals about general outcomes of familiarity, to the more concrete, such as asking about specific behaviors in the group. The questions on the template were often followed up with others that seemed appropriate to ask during the interview. This practice is also consistent with inductive research (Eisenhardt, 1989). For example, if one member had previously mentioned a pivotal event in the history of the organization, I would then ask other members to describe the same event from their point of view.

The interviews with the film crew members were semi-structured due to the nature of the work. For the most part, the group members were unable to sit and talk exclusively, so I had to interview them as they worked or during lunch. In addition, a few of the interviews were conducted with several members of the crew at one time. The interviews with the SWAT team, doctor’s office, and real-estate office were conducted on a one-on-one basis, in private. All of the individuals who participated, either through an interview or survey were assured that any and all information that they provided would be kept in strict confidence. I suspect that people were comfortable being candid and honest since most individuals were forthcoming about potentially uncomfortable subjects such as discussing individuals that they did not like. As a matter of fact, most individuals were very straightforward and provided lengthy descriptions for why they did not like a person in the group.

Other sources: I also gathered some of the same information on the interview template in the form of a survey at the doctor’s office. Due to the time constraints and the busy work environment, I became aware that I would not be able to interview all of the members. The amount of time interviewing was limited because they only had 30 minutes for lunch. To account for this, I asked all of the members to answer survey questions about their position and familiarity before I conducted the interviews. This way, I had some prior information from every member of the organization, and if I knew that the interview was going to be short, I could focus on the more involved questions.

Data Analysis

I used group cross-case analysis to understand how individuals conceptualize familiarity.

Group cross case analysis: In order to analyze the data, I first created group case summaries, based on observational and interview data, for each of the organizations. These summaries contained information on relationships between individuals, how individuals
form and maintain these relationships, and how these relationships impact the group. In addition, the case summaries contained information about the structure of the group, the tasks that the group performed, and the history of the group. Some of the data in the case studies came from the observational data, such as behaviors towards one another and apparent relationships. I also gained some information in informal conversations, which contributed greatly to my understanding of the relationships between people and this information was recorded in my field notes.

I then created individual case summaries based on the interview data. I read each of the interview transcripts repeatedly in order to get a feel for how individual group members thought about familiarity. Next, I created a summary of how each individual characterized familiarity. From these individual summaries, I constructed group summary information based upon the terms in which people from the group tended to mention familiarity. In these case summaries, I highlighted trends that surfaced as individuals described their relationships with others. For example, if one individual mentioned that, when they were familiar with someone they wanted to go out of their way to do more to help, I would flag this as a concept for further study. If more than two individuals in a group mentioned a concept, I would add the concept to the group case summary. Then, I would read the transcripts from the other groups to see if the concept was mentioned more than twice. If a concept was mentioned by at least three individuals in at least two of the groups, or I recorded evidence of the behavior at least three times in at least two of the groups, I considered it a theme to be included in this paper. For the purpose of this paper, I was primarily interested in emerging themes, not the relative prevalence of themes within or across groups. Therefore, I conducted the analysis by reading the transcripts, rather than through word counts and content analysis software.

**Tree diagrams:** I used the interview data to create tree diagrams that investigated group members’ cognitive schemas about familiarity. Tree diagrams have been used to explore different types of cognitive relationships (Jehn, 1995; Werner & Schoepfle, 1987). I created tree diagrams in response to 3 questions asked of the group members (how would you define familiarity?; how do you go about building familiarity with others?; and how do you think that familiarity with others affects the work of the group?). I used individual responses to these questions to diagram how each respondent thinks about familiarity and how they think it impacts the group.

**CONSEQUENCES OF FAMILIARITY IN THE WORKPLACE**
While some research has looked at the outcomes of familiarity on behavior, there are several limitations to these studies. First and foremost, most studies on familiarity have been conducted in an experimental setting. With the exception of Goodman & Leyden’s (1991) study of coal mining crews, familiarity has not been studied in organizations. Second, reasons for behavior have been postulated after the fact; they have not been explicitly studied. Third, familiarity has been assessed by asking people (usually students) how well they know one another. It is quite possible that this question captures friendship rather than familiarity (Rockett & Okhuysen, 2001). In some cases (Jehn & Shah, 1997; Shah & Jehn, 1993), they explicitly studied friendship. It is important to separate the two because they are often distinct concepts with distinct outcomes. The data gathered from the interviews and observations address these limitations by providing real life organizational examples for how individuals behave towards one another on the basis of their familiarity with one another.

Individuals in all four groups discussed negative behaviors. However, the type and strength of the negativity came in different forms depending on the organization. Sometimes this was because of individual differences, but more often, it seemed that behaviors differed because of organizational constraints.

**Negative Behaviors**

In most cases, individuals started with positive interactions, but an event triggered the shift to negative interactions. However, in some cases negative behaviors occurred without a triggering event. Some of these behaviors occurred because of personality issues, but many times it was due to a professional matter, such as miscommunication.

Negative behaviors such as sabotage and workplace violence are dramatic examples of how negative emotions can get out of hand. However, in the groups I studied the negative behaviors expressed were generally much more subtle and insidious. The three negative behaviors that occurred in the groups were avoidance, arguments, and gossiping.

**Avoidance**

Individuals who do not like a coworker will often avoid that person for two reasons. First, they simply prefer not to interact with a person that they do not like. Second, they often choose to avoid an individual that they do not get along with to prevent future problems. Avoidance can have both positive and negative implications for the group. It can be positive if it does prevent future
problems from occurring (xx). However, it can be negative if it is necessary for two individuals to work together for the good of the group, and the avoidance leads to problems with efficiency and productivity (xx). Avoidance behaviors were present in both the film crew and real estate groups. The members of these groups had a moderate amount of discretion regarding who they interacted with and how often. For example, if one of the members in the sound department disliked someone in special effects, they could choose to avoid the disliked person and send someone else to deal with them. The same thing happened in the real estate group. In cases such as these avoidance did not appear to detrimentally affect the group.

However, sometimes avoidance was taken to the extreme, and it did hurt the group. For example, the members of the film crew had the ability to take the extreme of avoiding people, which was to not take projects that a disliked person was participating in. A case that presented itself was of one of the members of this project who disliked an actor so much that he had turned down films because this actor was working in them. This might detrimentally affect the group if they are unable to sign a potentially valuable contributor to the film because that member is trying to avoid someone else.

The real estate group also exhibited extreme avoidance behaviors in several cases, which were harmful to the group. There were several instances of partners who had a difference of opinion with the president and as a result of their fighting they physically distanced themselves, with the partner moving to another part of the building, or another building entirely. This was detrimental for two reasons. First, it broke down the lines of communication; so much information that was important to the projects was either omitted or lost in transit. Second, it further fostered the air of distrust that pervaded the office atmosphere.

Avoidance was extremely rare if not impossible in the SWAT team and doctor’s office. The only form of avoidance that was open to members of these groups was resignation. The SWAT team members had to be a team, to work well together, and any withdrawal or avoidance would have broken down the structure of the team. If a member disagreed enough with a team member for any reason that was serious enough to cause avoidance he would have left, or would have been asked to leave.

Avoidance within the doctor’s office did not occur mainly because of the structure of the office. It was so open and crowded that it would have been impossible for someone to avoid a coworker. In addition, if there was any hint that someone was avoiding someone else, it would be immediately noticed and everyone would start asking questions. For example, there was one individual who left to go home for lunch. One of the other members would question her every day about where she was going and why she would not stay for lunch. The individual was leaving for personal reasons that she wished not to discuss and would avoid the
questions. Finally, the individual who felt that she was being avoided went and complained to the office manager about the situation, and went as far to insinuate some improper behavior on the part of the employee who was leaving for lunch. Needless to say, the mere hint of avoidance caused so much trouble that people went out of their way to make sure that they were not avoiding others.

Arguing

While avoidance behaviors just had the potential to cause problems, argumentative behaviors almost always actually did. Researchers have found that conflict can be good for groups (Jehn, 1995; Shah & Jehn, 1993). Task conflict is thought to improve decision quality by fostering the consideration of multiple alternatives and different perspectives (Schweiger, Sandberg, & Ragan, 1986; Schweiger & Sandberg, 1989; Schweiger, Sandberg, & Rechner, 1989). On the other hand, interpersonal conflict, conflict between individuals about issues of a personal nature, is thought to be detrimental to groups (Jehn, 1995; Pelled, 1996).

When conflict did occur in these groups it was usually task related. However, I found that in these groups task conflict sometimes led to interpersonal conflict and individuals often used task related reasons to explain why they liked or disliked others. I define the term argumentative behaviors to be those behaviors whose original roots lie in a task conflict but escalate to a public airing of grievances. That is, when conflict evolves into a public spectacle of name calling and yelling, it is determined to be argumentative behavior.

Argumentative behavior only erupted between those who knew one another well. Sometimes it had very negative consequences, such as the embarrassment of someone in the group or one of the members leaving the group. Other times, group members would engage in very heated arguments and would be friends again the next day. Argumentative behaviors occurred in the real estate office, doctor’s office, and film crew, but not in the SWAT team.

The argumentative behaviors in the real estate office and doctor’s office were similar along two dimensions. One, they were generally triggered by a relatively small, and normally insignificant event that was the “last straw”. Typically they occurred between group members who disliked one another. Also, they often resulted in a permanent, irreparable rift in the organization that sometimes resulted in someone leaving.

Many of the problems mentioned earlier in the real estate group can be directly linked to an argumentative episode that erupted between two of the group members, one of which had displayed argumentative behaviors frequently before. The episode centered on
a disagreement about the setting of the thermostat. One of the individuals approached the other and began loudly argue with her about the temperature. As the argument escalated the exchange became more personal with name-calling and threatening words issued. The exchange ended when one of the individuals left. The argumentative behavior of the secretaries transferred to the partners, who each took his secretary’s side and the result was a split in the partnership. The surprising thing is that these two secretaries had once been such close friends that they had even vacationed together.

The doctor’s office also displayed some argumentative behaviors. One of the peculiar aspects of the office, the daily rotation of nurses, was a direct result of a history of argumentative behaviors. One of the doctors explained that when they started the practice over 25 years ago, they had each had their own nurse. However, over time the nurses became overly protective of, and very territorial about, their doctors and their equipment. They started engaging in argumentative behaviors, what one of the doctors called “hen-fighting”. They found that the only way to control this behavior was to limit the amount of time each nurse spent with a specific doctor, so they changed the structure to have each nurse work with a different doctor each day. This is important to note because it is very different from the norm in doctor’s offices. Most, if not all, doctor’s offices have one nurse per doctor. While doctors recognized that it led to some inefficiencies, they felt that it was much more effective over the long term, and would not entertain any ideas about changing it back.

In the doctor’s office, as in the real estate group, the argumentative behaviors only occurred between familiar members.

Perhaps the most interesting displays of argumentative behaviors were exhibited by the film crew. They were different from the other two groups in that the arguments were often cross-gender, and they could be very heated arguments between good friends who would remain friends after the episode. Another interesting aspect of the argumentative behaviors in the film crew was that they tended to increase as the project came to an end, with the great majority of them occurring in the last week or so. There are two possible explanations for this. One is that after spending so many hours together for so many weeks they are beginning to grow weary of the project and one another, so tempers flare. Another, more interesting explanation, was proposed by one of the members. He likened the film crew to a married couple. They first go through the honeymoon stage, then exist comfortably with one another for a while, then get divorced. He stated that the process was very similar with the crew. They would be enthusiastically happy at the beginning, then work smoothly, and then go through a period of fighting in anticipation for the breakup in order to psychologically distance themselves.
The SWAT team did not display hurtful argumentative behaviors because group norms would not allow for it. If they were unhappy with one another they were expected to deal with it and move on, without any negative consequences. Plus, while task disagreements existed, interpersonal disagreements were rare. They generally did not pay attention to interpersonal differences because they felt that they were unimportant to getting the work done.

Gossiping

While argumentative behaviors are a very visible outcome of negative relationships, there are other more subtle outcomes, such as gossip. Gossip occurred for several reasons. One is that there was interesting information to share, such as the news that someone was engaged. Another is that an individual had a gossipy personality, like a certain individual on the film crew that everyone would go to for the news on the set. Also, sometimes gossip was the result of boredom, such as when individuals in the real estate group gossiped when business was slow and they finished work early. However, in these cases gossip did not have a malicious intent and usually did not damage the person being gossiped about.

However, sometimes gossip was spread with the sole intent of hurting someone. Gossip was generally about someone that the gossip spreader knew and did not like. Typically gossip had a small kernel of truth to it that was exaggerated to make a much more scandalous story. Also, the real estate and doctor’s offices tended to have just one or two gossip spreaders that were both encouraged and condemned, depending on who was being gossiped about.

Gossip was a real problem in both the real estate and doctor’s offices, but they seemed unable or unwilling to fix the problems. One individual in the doctor’s office was known to gossip about others. Yet individuals told me that they were surprised when the gossip was about them, even though they had been on the listening end of the gossip many times. Gossip about an alleged affair between a doctor and a nurse in the past resulted in the resignation of the nurse. Gossip also sometimes led to argumentative behaviors.

The gossip in the real estate office also caused problems. One individual who is known throughout the office for his gossip has been moved to another section of the building to prevent some of the problems. Another who gossips in order to hurt others does so to discredit others and make his position that much more stable. He routinely coaxes new employees into sharing personal information that he later uses against them. Most of the individuals who have worked with him for a while distrust him and avoid
giving him any information about themselves. Unfortunately, they also withhold information on projects that they are working on and this is a problem because he is involved with most of the properties and needs to know what is going on. The gossipy behavior that he exhibits thus impedes the flow of information.

The film crew members had some gossip, but gossip was really only paid attention to if the information was useful and if the gossip spreader was trustworthy. That is, gossip for the intent of hurting someone was usually ignored, because it did not help him or her make any decisions and it usually did not come from a trustworthy source. Reputation is very important in the film business and people pay attention to information about others. However, they only seem to pay attention to that information if the person giving it is someone that they know well and trust. For example, if an individual was told by someone that they knew and trusted that another individual was unqualified to do a job, they would often pass on hiring that person. However, if someone on the set that they either did not have a relationship with, or they knew was a gossip, gave them the same news they would likely ignore them, choosing to take a chance. Gossip may not be as big a factor because of the diverse nature of the film crew. Or perhaps gossip is not as harmful because it is such a large group, over a large area, to disseminate information to.

The SWAT team did not gossip much for two reasons. As previously mentioned, the structure of the task dictates that they all get along and engage in behaviors that build trust. Gossip would destroy any trust that they might have and put group members’ lives in jeopardy. Also, it does not seem that they know (or care to know) much of the more personal details of one another lives that would lead to gossip. While they would classify themselves as highly familiar with one another, they are not familiar with intimate details of one another’s lives. That is, they were familiar with each other on a professional dimension, but not personal.

The negative behaviors that these groups displayed can, and often do, lead to negative outcomes. Negative behaviors can escalate and lead to other negative behaviors as well. Avoidance can lead to hurt feelings, which lead to argumentative behaviors. Gossip can lead to embarrassment, which can lead to sabotage. While it seems that personality plays a part in the expression of negative behaviors, the organizational structure seems to influence it as well. The groups of the real estate and doctor’s office seemed to have more problems with negative behaviors, because of their greater levels of familiarity and the fact that they were confined to a small space. The film crew seemed to express fewer of the negative behaviors, possibly due to the short-term nature of the project. Last, the SWAT team had the fewest overt negative behaviors, because they were constrained by the hierarchy of the team and the nature of the work. The results are presented in table 2.
### TABLE 2

**Negative Behavior**

<table>
<thead>
<tr>
<th></th>
<th>SWAT Team</th>
<th>Film Crew</th>
<th>Doctor’s Office</th>
<th>Real Estate Office</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avoidance</strong></td>
<td>Source</td>
<td>Observation</td>
<td>Interview</td>
<td>Observation</td>
</tr>
<tr>
<td></td>
<td>Example</td>
<td>It is impossible to avoid other team members. If negative affect was strong enough to elicit the desire to avoid, the team member would have to resign.</td>
<td>“...if there’s somebody there that’s just a pain in the butt to work with, then I just try to avoid them.”</td>
<td>The doctor’s office is fairly small and it would be difficult, if not impossible to actually avoid anyone for very long.</td>
</tr>
<tr>
<td><strong>Arguing</strong></td>
<td>Source</td>
<td>Interview/Observation</td>
<td>Interview</td>
<td>Observation/Interview</td>
</tr>
<tr>
<td></td>
<td>Example</td>
<td>Occasionally arguments arise, but mostly over task related issues. “I mean there has been arguments among the team, not violently hate you kind of arguments, but argument differences in philosophy…”</td>
<td>“Just the way he talked to people, always yelling.”</td>
<td>Nurses were rotated weekly between doctors due to previous instances of “hen fighting” which lead to serious organizational problems such as hoarding of equipment.</td>
</tr>
<tr>
<td><strong>Gossip</strong></td>
<td>Source</td>
<td>Observation</td>
<td>Observation</td>
<td>Observation</td>
</tr>
<tr>
<td></td>
<td>Example</td>
<td>While individuals on the team do sometimes discuss</td>
<td>In one instance the lead actor of this film came over</td>
<td>An instance of gossip about an alleged affair</td>
</tr>
</tbody>
</table>
the performance of others, they do not appear to talk about people in a gossipy or hurtful manner. and sat with the head of the sound department and they engaged in gossip about another famous actor that they both had worked with and disliked intensely. between a nurse and a doctor led to the resignation of the nurse.

DISCUSSION

The four groups studied all had much more complex outcomes of familiarity than previously thought. Individuals use knowledge to inform their understanding of others, but affect seems to be a driver of their behaviors toward others. Individuals in all groups recognize that both positive and negative affect play a part in familiarity with others. However, the way in which they experience and express the affect they have for others differs from group to group.

While positive behaviors are certainly important to study, the negative behaviors proved to be the more interesting and perhaps more influential behaviors in this study. Labianca & Brass (1997) proposed that negative relationships can create social liabilities. In three of the four groups, the negative behaviors did seem to create problems for the group and sometimes for the whole organization.

The real estate group had all of the negative behaviors. They experienced avoidance, arguing, and gossip at moderately to extremely high levels. The results of the negative behaviors have been far-reaching and costly to the organization. One of the consequences is that they have had trouble retaining quality employees. Another consequence is that they do not socialize much anymore. The socializing was the proverbial glue that had previously held the group together. It was through the social activities that individuals who did not work directly together got to know one another and felt like more of a group and perceived a common organizational goal. Now that they no longer socialized, individuals seemed to feel as if they were not part of a group; rather they felt as if they were independent entities working for different goals. Also, individuals are much less likely to share information freely.
because some individuals have taken credit for information and ideas that they obtained from others. In addition, at least one partnership was dissolved, in part, due to the fighting that was occurring between employees.

The film crew and doctor’s office also had some instances of negative behaviors, but they seemed to have much healthier ways of expressing and dealing with these behaviors. For example, the film crew preferred avoidance to arguing, which probably saved some feelings and time. The doctor’s office did not handle their problems quite as professionally, but they were unable to avoid one another. Gossip was the outlet through which negative affect was usually expressed. While these groups did not have serious problems with negative behaviors, it is important to note that even the mild to moderate expression of negative behaviors has consequences. For example, avoidance can lead to missed opportunities, communication breaks, and hurt feelings. Gossip can lead to hurt feelings, retaliation, and sometimes resignation. It seems that some negative behaviors are better than other, but they all have some cost associated with them.

The SWAT team expressed few negative behaviors. The only negative behavior that I found evidence of was arguing. Sometimes group members would get into heated arguments about the best strategy for going about doing something, but generally an agreement would be reached and they would move on to new issues. These arguments seemed to have no negative effect on the group, in part because they were about task related issues, not interpersonal issues. The team did not have the option to avoid. Team cohesion would be broken and this could put lives in danger, so it seemed to be understood that if negative feelings ever rose to such a serious level, the person would resign from the team. I did not observe any gossip about others between members of the SWAT team.

One weakness of this study is that I was not present to capture the relationships as they were just beginning. Therefore, I had to take their explanations for how they formed familiarity with others rather than direct observations about how relationships formed. I do not feel that this is a problem for the positive relationships, but it might be a problem for the negative relationships.

The purpose of this study was to study familiarity and to try to understand some of the potential negative outcomes in the workplace. The evidence gathered supports my argument that familiarity does more than contribute to positive behaviors. It seems that there is some truth to the saying “familiarity breeds contempt”. The next step in this process is to study why some organizational structures and particular relationships “allow” for these negative outcomes, and others suppress them. That is, why do some groups go bad?
REFERENCES


ABSTRACT

This manuscript investigates the relationship between outcome interdependence (OI) and voice behavior. Specifically, it examines this relationship by addressing the impact of three distinct types of OI (i.e., cooperative, competitive, and individualistic OI) on three parallel types of voice behavior (i.e., pro-social, self-serving, and acquiescent voice). Based on a social interdependence theory approach, this manuscript reasons that perceived cooperative OI is suggested to stimulate team members to engage in pro-social voice with other-oriented motive, whereas perceived competitive OI should drive team members to participate in self-serving voice based on a self-oriented motive. In addition, perceived individualistic OI should motivate team members to participate in acquiescent voice with a disengaged motive. These relationships, however, may be influenced by team characteristics such as task interdependence (TI). As such, we propose that the strength of the relationships between specific OIs and voice behaviors should be stronger in high TI teams than in low TI teams.

Keywords: Outcome interdependence; Task interdependence; Voice behavior; Social interdependence theory

INTRODUCTION

As employee voice behavior has become increasingly pervasive in organizations, practitioners and researchers alike have come to notice the potential of voice behavior in improving team effectiveness (Dreu, 2007; Van Der, Gerben, & Van Der, 2001; Wageman & Baker, 1997). Voice behavior is “intentional expression of work-related ideas, information, and opinions” (Van Dyne et al., 2003, p.1370), and is recognized by many as an important element in team operation. With an explicit assumption that voice behavior adds positively to teams, prior researchers have demonstrated that it can help teams generate creative ideas and focus on team interests in solving work problems (Lepine & Van Dyne, 1998, 2000, 2001), which may in turn prevent the formation of group-think (Janis, 1982; Pyman et al., 2006) and contributes to enhanced team functions (e.g., Detert & Burris, 2007; Gurdon & Savitt, 2000; Nikolaou, 2008). More recently, theorists have challenged this assumption by asserting that voice behavior is a
more complex construct and may not always adds positively to team performance. Van Dyne et al. (2003) posit voice behavior as a multidimensional construct and suggest three specific types of voice behavior: pro-social, defensive, and acquiescent voice. Pro-social voice, with an altruistic motive, has been framed as a form of citizenship behavior with a purpose of merely benefiting teams; defensive voice is a fear-based behavior aimed at protecting the self; and acquiescent voice, with a disengaged motive, focuses on resignation and not taking any individual responsibility.

While empirical research on the causes and effects of pro-social voice in groups and teams is abundant, very limited research has been done on the other two types of voice behavior. Pro-social voice, with a focus on the interests of others rather than the self, has been the “voice of choice” in most empirical studies. Researchers have investigated potential antecedents of pro-social voice. Personality and trait variables, such as the Big Five, self-esteem, and locus of control, have attracted the most attention. Evidence has been found for the impacts of these variables on pro-social voice (Brockner et al., 1998; Nikolaou, 2008). In addition, influences of contextual variables such as leadership behaviors, group size and group structure on pro-social voice, have also been explored (Chelminski et al., 2007; Detert, 2007). In contrast, within these limited studies on defensive voice and acquiescent voice, researchers have merely implied that these two types of voice behavior are less beneficial and sometimes even detrimental to team functions (Fuller et al., 2007; Van Dyne et al., 2003). Very little research has been conducted investigating how and why these two types of voice behavior are engaged. As a result, we have yet to know more about the causes and effects of the two types of voice behavior. If pro-social voice is indeed the more beneficial and hence more desirable voice behavior, as suggested in extant literature, it should be encouraged. On the other hand, if defensive voice and acquiescent voice are less beneficial or even harmful, as implied by the motives behind them, they should be constrained.

Following this line of thought, this paper supports the idea of a multidimensional voice behavior construct, and presents that voice behavior may not be pro-social in nature, and may be motivated by self-interest. Specifically, voice behavior is more or less constrained to a given situation, and serves to achieve various individual, team, and organizational goals in that situation (Deutsch, 1949). In other words, the way individuals voice themselves is related considerably to their specific goals in a given situation. The cues and/or demands of the situation can influence whether the individual should employ an other-oriented or a self-oriented approach toward the achievement of these goals. Another point worth noting here is that, of the three dimensions of voice behavior proposed by Van Dyne et al. (2003), defensive voice based on fear may not tell a full story about the type of voice behavior motivated by self orientation for the reason that a self-oriented approach would be defensive or assertive in nature and demonstrated in a defensive or assertive manner. Thus, this paper uses self-serving voice instead of defensive voice. Compared to pro-social voice, the latter two types of voice, i.e., self-serving and
acquiescent voice, however, have been overlooked by most extant research. To fill this gap, this paper contributes to the literature on the antecedent side of the equation by investigating situational antecedents of these three types of voice behavior: pro-social voice, self-serving voice, and acquiescent voice.

To the degree that voice behavior serves to achieve various individual, team, and organizational goals in a given situation (Deutsch, 1949), situational characteristics, such as outcome interdependence (OI) and task interdependence (TI), may have significant impacts on how individuals voice themselves in a work setting. According to Social Interdependence Theory (SIT; Deutsch, 1949, 1973), social interdependence exists when individuals’ work outcomes, i.e., goal achievement and rewards, are influenced by each other’s job performance. The tenet of SIT is that the way outcomes are structured (i.e., OI) defines the individuals’ psychological and interactional processes in a given context. These processes, in turn, determine the results of the situation (Deutsch, 1949, 1973). SIT defines three types of OI: cooperative, competitive, and individualistic. Cooperative OI implies positive relationships, whereas competitive OI implies negative relationships, among team members’ goals and rewards (Deutsch, 1949, 1973). Individualistic OI only exists when team members perceive that attainment of their goals and rewards are unrelated to others’ attainment of their goals and rewards (Deutsch, 1949, 1973). SIT indicates that team members’ voice behaviors should be influenced by the type of OI that governs the task at hand (Deutsch, 1949). In other words, OI may serve as behavioral cues to team members regarding what type of voice should be used.

The strength of OI as a cue for the choice of voice behaviors, nonetheless, may be influenced by a second contextual factor: task interdependence (TI). LePine and Van Dyne (1998) suggest that teamwork characterized by high TI represents the context where voice can have significant impact on team performance. TI is a team characteristic describing the degree to which the team emphasizes interactive, dependent task relationships among team members (Kiggundu, 1983). Members in high TI teams rely on one another in the completion of individual and team assignments (Van Der Vegt et al., 1998, 2000, 2001). Despite the increasing attention toward TI in the literature (Bachrach, Powell, & Bendoly, 2006; Pearce & Gregersen, 1991), no published studies have explored the role of TI as a potential moderator on the relationship between OI and voice behaviors. This paper, therefore, concerns the purposes and motives that underlie the various types of voice behavior, and focuses on team characteristics such as outcome interdependence (OI) and task interdependence (TI) in examining the rationales, needs and goals that drive team members to (dis)engage in a particular type of voice behavior. The purpose of this paper is two-fold. As shown in figure 1, this paper will first examine the relationships between OI and the various types of voice behaviors. Then it will explore the potential of TI as a moderator of these relationships.
LITERATURE REVIEW AND PROPOSITIONS

Voice behavior

As a form of verbal communication in team work (Van Dyne et al., 2000), voice behavior involves submitting changes, and expressing concerns about a team’s own function, about one’s and other’s own issues, or about workplace matters that need to be done and how they can be done (Batt, Colvin, & Keefe, 2002; Janssen, Vries, & Cozijnsen, 1998). The conceptual discussion of voice has undertaken two major approaches. The first approach identifies voice as a vocal behavior intended to make suggestions for change, and the second describes voice as a fair process for employee participation in decision making (Van Dyne et al., 2003). For purpose of this paper, we use the first approach and define voice behavior as an intentional vocal behavior concerning individual or job-related problems, with a purpose of achieving individual, team, and organizational goals in a given situation.

While much research to date has considered voice as an extra-role behavior in the team environment (LePine & Van Dyne, 1998; Zhou and George, 2001), several researchers have
alluded to the fact that voice is a multidimensional construct (Fuller et al., 2007; Van Dyne et al., 2003). Van Dyne et al. (2003) suggest three specific voices, i.e., pro-social, defensive, and acquiescent voice, by applying Morrison and Milliken’s (2000) distinction between silence based on fear (Acquiescent Silence) and silence based on feeling unable to make a difference (Defensive Silence) to parallel forms of Voice (Acquiescent Voice and Defensive Voice). This paper extends the conceptualization of voice from Van Dyne et al. (2003), and contends that as a construct, voice behavior has three dimensions: pro-social, self-serving voice, and acquiescent voice, each with a distinct underlying motive.

Pro-social voice is defined as an expression of cooperativeness and intends primarily to benefit others’ welfare such as teams and/or organizations (LePine and Van Dyne, 2001). As Van Dyne et al. (2003) put it, pro-social voice is intentionally other-oriented and is motivated by social welfares. For this reason, pro-social voice is desirable in both teams and organizations as a form of citizenship behavior with a purpose of expressing constructive changes and improving the status quo (LePine and Van Dyne, 2001; Nikolaou et al., 2008). In fact, pro-social voice has, by far, gained the most attention from both researchers and practitioners. Many empirical studies suggest that employees’ expression of opinions, suggestions, and potential solutions to workplace problems are invaluable in decision making, error correction, and innovation development during team operating processes (Beer & Eisenstat, 2000; Zhou & George, 2001).

Self-serving voice, on the other hand, is motivated by self-interest and serves the purpose of protecting or enhancing the self rather than the others (Fuller et al., 2007). Fuller and his associates also suggest that self-serving voice usually takes two forms: self-protection or self-promotion, with the former being defensive in nature and the latter assertive. Defensive voice is intended to protect the self from potential harms such as reputation damage and interest loss. It can help team members dissociate themselves from potential responsibility for a negative outcome/behavior, justify an error by suggesting that it is not as unacceptable as it seems, and shift attentions to other involved members rather than the self (Aleksander et al., 2002). Defensive voice thus is a vocal behavior characterized by safe and secure verbal conducts (Van Dyne, Ang, & Botero, 2003). In contrast, assertive voice is used to enhance the self. It is often focused on improving one’s image and creating an impression of competence, effectiveness, and capability (Fuller et al, 2007). As such, defensive voice, as defined by Van Dyne et al. (2003), captures only one of the two aspects of self-serving voice that stresses self-protection, and neglects the other aspect concerning self-promotion. For this reason, we contend that self-serving voice is a more appropriate third dimension of voice.

Unlike self-serving voice, acquiescent voice refers to the verbal expression of common work problems, aimed at avoiding personal responsibility of challenging the status quo (Van Dyne, Ang, & Botero, 2003, p.1373). It is a disengaged behavior with a feeling of low felt
responsibility or low capability to make any change. Given this presumption, resignation, a feeling of withdrawal, is often regarded as one of the primary motives driving acquiescent voice. Some researchers actually consider acquiescent voice a withdrawal behavior that individuals employ to psychologically or physically avoid the interactive team environment (Hulin, 1991; Roberson & Colquitt, 2005). As such, acquiescent voice contributes little to, if not obstruct, team work. However, studying acquiescent voice may benefit managerial practices. If acquiescent voice is a form of workplace withdrawal, recognizing acquiescent voice will allow managers to detect and diagnose employee motivation and/or satisfaction problems, before withdrawal escalates to absenteeism and even turnover. Hence, acquiescent voice would become a key concern in certain situations under which acquiescently voicing members can harm team functioning through interfering with team’s work flow (Hulin, 1991). In a nutshell, we treat voice behavior in three different forms: pro-social voice, self-serving voice, and acquiescent voice, and reason that voice behavior may serve different purposes and led by different goals in a given situation.

In sum, both self-serving and acquiescent voice have attracted less attention than pro-social voice and their impacts have been overlooked. This paper, however, suggests that self-serving and acquiescent voice should deserve more attention, because of its potential in harming on team functions. Understanding how self-serving and acquiescent voice affects team functions can not only help foster awareness of the potential negative consequences of self-serving and acquiescent voices, but also allow for the development corresponding prevention measures to curb the occurrence of these two types of voice behavior.

Outcome Interdependence (OI) and Voice Behavior

Social interdependence theory (SIT; Deutsch, 1949, 1973) posits that outcome interdependence (OI) can be understood in terms of the extent to which team members are presented with related team goals and rewards. SIT also suggests that there are three types of OI: cooperative, competitive and individualistic. Cooperative OI is characterized with positive relationships among team members’ goals and rewards. Individual team members believe that they can achieve goals and obtain desired rewards, if and only if, their teammates perform successfully in their common work activities (Deutsch, 1949; Johnson & Johnson, 1999). In contrast, competitive OI is known to foster negative relationships among team members’ goals and rewards. When OI is competitive, it is often a mutual understanding among team members that their goals and related rewards are only attainable if their teammates fail to accomplish the tasks at hand (Deutsch, 1949; Johnson & Johnson, 2005). Last but not least, individualistic OI, or outcome independence with unrelated goals and rewards (Deutsch, 1949; Johnson & Johnson, 2005), results when social interdependence is absent among team members. Individual members perceive neither positive nor negative relationship between each other’s outcomes. They
understand that the attainment of their goals and related rewards has little to do with how their teammates perform on the job.

SIT states that the structure of OI determines the actions of the individual in that situation (Deutsch, 1949; Johnson et al., 1979; Johnson & Johnson, 1974). As a contextual variable, OI specifies the interactive activities, such as voice, among individuals in the team environment (Johnson & Johnson, 1999). In other words, the type of OI determines how individuals must interact with one another to achieve their goals and to obtain desired rewards. Two basic types of interaction have been observed: promotive interaction, which promotes and facilitates the goal achievement of others, and oppositional interaction, which obstructs and blocks others’ goal achievement (Deutsch, 1949, 1973; Johnson, & Johnson, 2005).

According to SIT, as cooperative OI motivates promotive interactions, competitive OI fosters oppositional interactions and individualistic OI discourages interactions. Promotive interaction occur when individuals perceive the paths to their goals and rewards as intertwined with those of their teammates, and subsequently engage in interpersonal activities that can improve the chance of each other’s success in achieving their goals and obtaining desired rewards. These promotive interpersonal activities often involve helping each other and exchanging job-related resources (Tjosvold, 1986, 1988, 1989). Oppositional interactions are evident when individuals perceive that the paths to their goals and rewards is only open when the paths for the others crumble, and consequently take actions that decrease the chance of the others’ successful achievement of their individual goals. In oppositional interactions, individuals focus not only on achieving their own goals but also on preventing any other person from attaining his/her goals. This type of interactions often involves activities such as withholding critical information and striving to defeat one’s teammates. When OI is individualistic, individuals perceive the paths to their goals and rewards as parallel to those of their teammates, and participate in actions that promote the achievement of their own goals with minimum interaction with their teammates. In the case of individualistic OI, individuals focus only on increasing the chance of their own goal achievement, and ignore the goals and the performance of others as they are deemed irrelevant.

Given its conceptualization of OI and its implications regarding interpersonal behaviors among team members, SIT provides a theoretical framework for us to construct our arguments regarding OI as a situational antecedent of voice. As a direct verbal interaction among team members, voice should be influenced by OI (Deutsch, 1949; Johnson & Johnson, 2005). According to SIT, OI may determine the motives or goals that underlie team members’ voice behaviors. SIT, as developed by Deutsch (1949) in particular, lends us support in arguing that the three types of voice (i.e., pro-social, quiescent, and self-serving) may each correspond to a certain type of OI (i.e., cooperative, individualistic, and competitive).
Hirst (1988) examined the effects of outcome setting on intrinsic motivation, and suggested that intrinsic motivation of certain behavior should be a positive function of OI. Our contention is that this same type of pairing can be done with the OI and voice behavior dimensions from Deutsch’s SIT theory and three conceptual types of voice. The logic behind this argument comes from Deutsch’s (1949) conceptualization of substitutability, cathexis, and inducibility, as the three psychological processes of SIT. Deutsch (1949, 1973) suggests that the combination of promotive and oppositional interactions influences these three types of psychological process. In the context of teamwork, substitutability refers to the degree to which actions of one team member can substitute for the actions of another team member; cathexis means investment of psychological energy, such as trust or hate, and liking or disliking, in other team members; inducibility is the extent to which a team member is open to being influenced by others and to influencing others (Deutsch, 1949; Johnson & Johnson, 2005).

SIT (Deutsch, 1949) suggests that cooperative OI would result in high substitutability, positive cathexis, and high inducibility, which should all be positively related to pro-social voice, which often include actions such as suggesting modifications in policies and expressing concerns about issues for the benefit of the team (Dreu, 2007; Johnson & Hebeisen, 1979). More specifically, when team members perceive cooperative OI, they are more likely to extend extra effort, such as pro-social voice, in order to prevent, or to make up for, the ineffective actions from their fellow team mates with a purpose of achieving joint goals (Johnson & Johnson, 2005). As tensions caused by ineffective actions by some team members is relieved by other team members’ effective actions, high substitutability becomes the psychological process that all members of the team experience. Concurrently, cooperative OI can also induce positive cathexis among team members (Deutsch, 1949). As team members develop positive attitudes towards one another, they engage in frequent and extended personal interactions, and in turn become more motivated to voice up for the welfare of the team (Van Der Vegt, Emans, & Van Der Vliert, 1998, 2000, 2001). SIT (Deutsch, 1949) also indicates that higher inducibility is a product of cooperative OI. As such, cooperative OI may make it more likely for team members to experience higher inducibility, i.e., to be more open and responsive to reciprocal social influences. As a mechanism to transfer social influence, pro-social voice is thus more likely to be observed in tasks with cooperative OI. Further support for this logic is found in Tjosvold’s (1986, 1988, 1989,1998) suggestion that cooperative OI should facilitate more open-minded and constructive voice in teams because team members feel more responsibilities for attaining joint goals and motivating each other to engage in more pro-social voice (Robinson, 1996; Robinson & Morrison, 1995). As such, we propose:

**Proposition 1a: Perceived cooperative OI is positively related to pro-social voice.**
Competitive OI, on the other hand, is more likely to be associated with self-serving voice. According to Deutsch (1949), competitive OI incurs low substitutability, negative cathexis, and low inducibility. It leads team members to assume that they are competing against their teammates for rewards and goal achievement, and that if they are to win, the others have to lose, and vice versa. In this situation, one member’s work would not substitute for others’ work since team members perceive much more responsibilities for their own rather than others’ jobs (Dreu, 2007). In addition, negative cathexis makes team members less likely to coordinate individual efforts into a systemized actions toward the attainment of joint goals (Johnson & Johnson, 2005). Rather, it gives reasons for team members to act in service of their self-interest (Van Dyne, Ang, & Botero, 2003). Self-serving voice, defensive or assertive, has been known for its effectiveness in preventing potential harm and personal loss, and in protecting or even enhancing one’s image by making one appear more competent in comparison with others (Bachrach et al., 2006; Fuller et al., 2007). As a result, pro-social voice becomes less instrumental and thus infrequent in a situation with competitive OI. Instead, self-serving voice becomes more popular because team members are motivated to speak up for the sake of their own interests (Van Dyne, Ang, & Botero, 2003). Therefore, competitive OI should evoke a higher level self-serving voice intended to ensure self-interests. We thus propose:

Proposition 1b: Perceived competitive OI is positively related to self-serving voice.

Finally, individualistic OI, or outcome independence, is unlikely to signal for pro-social or self-serving voice, but likely to evoke acquiescent voice. When team-members perceive OI as individualistic, that is, when they see their goals and rewards as unrelated to those of the others, they may see little instrumental value in conducting any social interactions for work purposes, and become disengaged toward one another and their team. As both pro-social voice and self-serving voice require a higher degree of engagement in work related social interactions, they are less likely to be observed in teams whose OI is individualistic, or, independent (Crombag, 1966). In fact, there has been evidence showing that team members are reluctant to voice themselves towards any of their teammates, or the team as a whole when they do not see interdependence in their goals and/or rewards (Alper, Tjosvold, & Law, 1998; Johnson, 1999; Johnson & Johnson, 2005). Acquiescent voice, however, may be preferred by team members when they perceive individualistic OI. As implied in SIT (Deutsch, 1949), individualistic OI does not trigger the experience of any of the three psychological processes: substitutability, cathexis, and inducibility. When team-members see OI as independent, they are unlikely to believe that their actions at work and substitute those of others; they deem their teammates as irrelevant to themselves and hence no need for emotional investments; and they see little valence in accepting others’ influence or in influencing others. As a result, they feel little responsibility to speak up and change the status quo. Acquiescent voice, then, offers a means for team-members to maintain an appearance as part of the team, without investing any attentional effort towards others. As such, we propose that:
Proposition 1c: Perceived individualistic OI is positively related to acquiescent voice.

TABLE 1 A summary of the above three propositions regarding OI and voice.

<table>
<thead>
<tr>
<th>Outcome Interdependence Type</th>
<th>Voice behavior Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative</td>
<td>Pro-social</td>
</tr>
<tr>
<td>Competitive</td>
<td>Self-serving</td>
</tr>
<tr>
<td>Individualistic</td>
<td>Acquiescent</td>
</tr>
</tbody>
</table>

Moderating Effect of Task Interdependence (TI)

The term “task interdependence” (TI) is defined as the connectedness among team members’ jobs (Kiggundu, 1981). TI has been considered as one of the most important team characteristics. High TI creates the expectancy among team members that their individual performance and collective performance is both contingent on one another’s work. Hence team members, in high TI teams, feel not only more responsibility (Kiggundu, 1983), but also more vulnerability and less power (Brass & Burkhardt, 1993; Van Der Vegt, Emans, & Van De Vliert, 2000), toward one another. Contrarily, low TI usually does not induce a sense of felt responsibility, vulnerability, or powerlessness. As such, high TI requires a high level of interpersonal interaction and cooperation, whereas low TI stresses autonomy (Van Der Vegt, Emans, & Van De Vliert, 2000).

As situational cues to team members (Van Der Vegt, Gerben, Emans, Ben, & Van De Vliert, Evert, 1998). TI may interact with OI in influencing member attitudes and behaviors at work. While high TI is in concert with cooperative OI as is low TI with individualistic OI, high TI appears incompatible with competitive OI. Whereas competitive OI cues members to compete against one another, high TI requires them to cooperate. Of particular interest to us is how the interactions between TI and the different forms of OI can influence team members’ voice. Extant literature has yet to address this question. However, it does give reasons for use to we expect that TI would influence the strength of the relationships between cooperative OI and pro-social voice, competitive OI and self-serving voice, and also individualistic OI and acquiescent voice.
When TI is high and OI is cooperative, cooperative OI may mitigate the tension caused by the sense of vulnerability associated with high TI, and increases cohesiveness among members because with joint goals. As these joint goals stimulate team members to seek more interpersonal helping, information exchange, and resource sharing, they can greatly increase team members’ felt responsibility for one another (Au et al., 2001; Brass, 1985). Hence, cooperative OI coupled with high TI can make team members more willing to speak up in a pro-social manner. However, the situation would be quite the opposite when TI is low, because low TI makes team members feel it is unnecessary to communicate with each other to get a job done (Van Der Vegt, Gerben, Emans, Ben, & Van De Vliert, Evert. 2001). Thus, TI is expected to strengthen the relationship between cooperative OI and pro-social voice.

Proposition 2a: Perceived TI moderates the relationship between cooperative OI and pro-social voice, such that the relationship is stronger when TI is high.

When TI is high and OI is competitive, however, competitive OI reinforces the feeling of vulnerability of individuals due to high dependency on relevant others. In order to reduce the feeling of vulnerability and increase personal power, team members are more likely to engage in defensive voice and/or assertive voice to gain competitive advantage over fellow team members. Hence, competitive OI paired with high TI signals strong situational cues to team members, for more self-serving voice to handle potential conflicts and to create/maintain competitive self-images. As such, high TI is also expected to strengthen the positive relationship between competitive OI and self-serving voice.

Proposition 2b: Perceived TI moderates the positive relationship between competitive OI and self-serving voice, such that the relationship is stronger when TI is high.

The moderating effect of TI on the relationship between individualistic OI and acquiescent voice behavior may be different from the former two. High TI is likely to weaken rather than strengthen this relationship, due to the connectedness among team members’ jobs. The perception of team tasks as being highly inter-connected drives team members to make every effort to interact with their teammates to ensure the completion of their own assignments. In other words, high TI may over-ride the effect of individualistic OI on voice. Maznewski and Chudoba (2000) found that teams that succeeded in high TI tasks had demonstrated more frequent communication among team members, even if they perceived certain degree of individualistic OI. On the other hand, low TI may shift team members’ attention from the overall team performance to critical individual performance requirements, stimulating them to work independently and care little for exchanges of task-related knowledge or information (Campion, Medsker, & Higgs, 1993). As such, when individualistic OI meets low TI, it would make team
members feel utterly unnecessary to participate in pro-social or self-serving voice. In comparison, acquiescent voice may be more likely to be observed. As such, we propose:

**Proposition 2c:** Perceived TI moderates the positive relationship between individualistic OI and acquiescent voice, such that the relationship is stronger when TI is low.

**CONCLUSION**

In this paper we have reasoned that OI is a contextual antecedent to voice behavior, and that the relationship between OI and voice behavior may be moderated by TI. We point out that extant literature on voice behavior is inadequate for two reasons: One is that the dependent variable that has typically been used to represent voice behavior is based on an exclusively pro-social motive (e.g., LePine, & Van Dyne, 1998). The other is that contextual factors, such as OI, have yet to be studied regarding their impacts on voice behavior, as most research has focused on individual differences as predictors of voice behavior. Our model addresses the two holes in the voice behavior literature.

First, as we adopt voice behavior as a multidimensional construct, we add new insights on one of the three dimensions, i.e., defensive voice (Van Dyne et al., 2003). We replace it with self-serving voice, which represents the dimension of voice behavior that includes both self-promotion and self-protection. Second, following the approach to voice behavior suggested by SIT (Deutsch, 1949, 1973; Johnson & Johnson, 2005), we explore three types of OI (i.e., cooperative, competitive, and individualistic OI) as potential antecedents of three corresponding voice behaviors (i.e., pro-social, self-serving, and acquiescent voice), providing a new perspective for researching voice predictions in working teams (LePine & Van Dyne, 1998). Finally, we include task interdependence as a moderator and draw upon literature on TI (Kiggundu, 1981, 1983) in developing arguments that the strength of the relationships between OI and voice behaviors may vary with TI.

One aspect of the relationship between OI and voice behavior that has not been addressed in this paper, is the potential effect of each dimension of OI on all voice behaviors. The relationships not predicted here, are not clear theoretically. Thus, future research will need to explore these linkages to develop theoretical explanations. Nonetheless, the propositions presented here can serve as a guide for future empirical testing. Empirical data obtained via experiments and surveys would be most appropriate in forthcoming studies, given the need to understand how perceptions of OI determine voice engagement. Also, while prior studies have examined pro-social voice in empirical research, it will be informative to investigate self-serving
voice and acquiescent voice so that variation of different voice behaviors across distinct types of OI can be better understood. This is particularly important since voice may contain different contents and thus exert different effects on team performance.

To echo an adage applied to the team environment that, voice is diversified in team work (Van Dyne et. al, 2003), it is time for practitioners and researchers to make a more concerted effort in conducting research studies that seek to develop a theoretical and empirical understanding of the relationship between outcome interdependence and voice behaviors.

REFERENCE


THE EFFECT OF EMPLOYER DIRECTED VOLUNTEERING PROGRAMS ON EMOTIONS AND ORGANIZATIONAL IDENTIFICATION OF EMPLOYEES

Jason R. Lambert, University of Texas at Arlington, jlambert@uta.edu

ABSTRACT

Corporate social responsibility (CSR) is a topic of management usually examined at the macro-level that analyzes companies and its philanthropic involvement, including antecedents and outcomes associated with CSR such as CEO decision making, reputation, and company performance all at the organizational level. However, an examination of the effect that a specific CSR activity such as employer directed volunteering has on a firm’s employees is somewhat overlooked. I argue that based on an understanding of theories in organizational identification, organizational justice, and affect, possible outcomes and consequences for employees who work in an environment may exist such as reduced intergroup conflict via re-categorization, increased organizational identification (OID), and a positive change in affect. Theoretically speaking, factors such as perceived organizational support and the significance of the volunteer activity may also moderate this relationship.

INTRODUCTION

Increasingly more companies are becoming involved in corporate social responsibility (CSR) (Dennis, Buchholtz, & Butts, 2007). Traditionally CSR has been studied at the macro-level, with considerable attention paid to the antecedents of corporate philanthropy as it relates to the decisions of CEOs and shareholders (Dennis et al., 2007). There has also been contribution to the field in respect to its positive outcomes and consequences at the organizational level such as organizational reputation and corporate performance (Parket & Eilbirt, 1975; Cochran & Wood, 1984; McGuire, Sundgren & Schneeweiss, 1988; Riordan, Gatewood, & Bill, 1997; Branco & Rodrigues, 2006). By utilizing this paradigm the effort, sacrifice, and perspective of the employee is overlooked leaving gaps in the literature that may be filled using research from organizational behavioral sciences.

CSR includes a variety of dimensions from corporate fundraising and employee volunteerism to managing diversity and community stewardship. Taking a micro-level perspective, employee volunteerism may have the most impact on employees due to the additional role they must fulfill, sometimes not within their expertise or own personal interests. For example, an organization that volunteers its employees once a month for beautification projects that recycle trash left on playgrounds may encounter conflict with employees that do not hold the same beliefs about the importance of recycling. Additionally, there are some employees that may have challenges with balancing their normal workload with other volunteer activities they may consider unimportant and unrelated to their job description. On the other hand,
employer directed volunteerism may serve as an activity that builds cohesion and develops and identity for the organization. Scenarios like this bring into question the theoretical framework of social identity theory (SIT) and how it explains the process of reducing inter-group conflict.

Over the years empirical research has demonstrated the effect of how the identification of an individual within a group is strengthened when super-ordinate goals are introduced (Tajfel, 1978; Turner & Tajfel, 1979; Mael & Tetrick, 1992; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993; Knippenberg & Schie, 2000). Although there is considerable research that has identified antecedents to identification, there are still gaps that need to be filled to better explain how identification process actually occurs and in what context (Ashforth & Mael, 1989). One could argue that there lacks the same amount of research to explain what specific events or activities within the organizational context may increase the social identification process. Questions need to be addressed such as how may the attitudes of the employees towards such programs impact their relationship with coworkers and the organization? What other possible outcomes have not been considered that may result from employee participation in volunteer activities? Could such employee volunteerism activities be utilized in ways that benefit the organization? In this paper I set forth propositions and a conceptual framework that depicts the possible outcomes and consequences of employee participation in employer directed volunteerism.

Following a brief review of the literature on CSR activities and volunteerism, I will examine employer directed volunteerism as a specific CSR activity through the lens of organizational behavior applying theories from organizational justice, social identity, self-categorization, and affective events theory (AET). This theoretical paper will also introduce a model that will attempt to shed light on how employer directed volunteerism may reduce intergroup bias within firms and positively impact the emotions and OID of employees. I will then conclude offering explanations of how employer directed volunteerism may be applied to the organizational setting as a strategy to possibly influence employee attitudes, and I will offer recommendations for future research.

**LITERATURE REVIEW**

**Corporate Social Responsibility and Volunteerism**

In 2005, 82 of the largest corporations in the United States increased their cash giving by a median of 10.1% (Wilhelm, 2006). However, since that time cash giving has decreased by approximately 8% as last reported in 2008, but it has been replaced by sweat equity (Morais, 2009) as companies have started to limit their monetary contributions to non-profit organizations and charities. Companies have learned how to benefit from such philanthropy as researchers have examined the links between philanthropy and such outcomes as financial profit and organizational reputation (Dennis et. al, 2007). For example, it has empirically been demonstrated that a company’s corporate social performance (CSP) increases its attractiveness to potential employees and job seekers (Turban & Greening, 1997). Some firms that understand the
benefits associated with CSR even allow employees to have either paid or unpaid time off work to undertake voluntary work in the community (Bussel & Forbes, 2001).

This corporate engagement with society is defined by Rupp, Ganapathi, Agilera, & Williams (2006) as a “process by which an organization expresses and develops its ‘corporate culture’ and social consciousness… as activities, decisions, or policies, that ‘organizations’ engage in to effect positive social change and environment sustainability” (p. 537). Programs that aid the environment, enrich education, and support health and social services are among a few examples. CSR activities are usually not reward – based, yet as the literature demonstrates, they may assist the organization in developing a positive reputation to consumers and enhancing networking relationships. These activities involve either employer-directed actions such as corporate giving, employee gifting, or fundraising, or volunteer efforts made on behalf of the organization through its employees. Unlike other CSR activities, volunteerism could arguably place additional stress on an employee due to the duality of the role fulfilled. An employee may experience role ambiguity and role conflict, but may also experience a new sense of responsibility and purpose by participating in such activities. Because of this impact volunteerism may have on the employee, a greater understanding of its effects on them is needed both in the organizational behavior literature and for practical purposes in the workplace.

According to Bussell and Forbes (2001) there are two distinct categories of volunteering. Employer supported volunteering refers to employee- led volunteerism, usually in the employee’s own time that is unpaid yet encouraged and supported by the employer but not compulsory. Employer directed involvement is employer directed, in work time with projects chosen to match the organization’s needs. The model I propose addresses employer directed volunteering, because it occurs during work time thereby giving total discretion to the organization. In this instance, I believe the imbalance of discretion between the volunteering employee versus the discretion of the organization may affect an employee’s attitude which will impact employee behavior. Both affect and social identification processes can explain how both positive and negative attitudes are formed.

**Affective Events Theory (AET)**

Researchers have begun to recognize the importance of affect in the context of organizations although it has been challenging for researchers to develop a definition due to the fact that emotions and moods are seldom differentiated (Weiss & Cropanzano, 1996), and emotional reactions may stem from not one but also many other related reactions (Weiss and Cropanzano, 1996). However, there is agreement on the essential characteristics of emotion. Fridja (1993) names four components to the emotional experience. First, there is the process of experiencing the emotion which gives feelings their emotional and non-cognitive character (Fridja, 1993). A person’s feeling of pleasant or unpleasantness is derived more from an appraisal of a particular source or event before the person may even categorize their own personal awareness of feeling good or bad. Secondly, the affective experience is a precursor to the cognitive appraisal process (Plutchik, 1994). Third, emotions may induce physiological changes which may include a heightened awareness of the environment resulting in readiness
and increased arousal or vigilance (Fridja, 1993). Lastly, unlike moods, in all definitions of emotion there is the implicit understanding that they occur as a reaction to an event (Weiss & Cropanzano, 1996).

Emotions traditionally have been classified into six categories (Shaver et al. 1987): love, joy, surprise, anger, fear, and sadness. Most researchers agree that emotional states can be organized into these “families” (Weiss & Cropanzano, 1996) for they show up repeatedly in behavioral research. However, they could include sub-categories which may provide a more definitive description of an emotional state. Since a person’s environment, whether it includes events, people, or things, has to be appraised in order for them to experience an emotion (Weiss & Cropanzano, 1996) the families of emotions may be too broad of a semantic to define an emotional state since there are so many appraisals that can occur. In response to this dilemma there are twenty four recognized subcategories or variants that correspond to the six families of emotional states (Shaver, Schwartz, Kirson, & O’Connor, 1987). The emotion of joy has variants of cheerfulness, contentment, enthralment, optimism, pride, relief, and zest, with pride being the one related to the proposed model.

Emotions are also outcomes of work group characteristics (Brief, Butcher, Roberson, 1995). Positive work-related life events may include those that positively reflect on a worker's competence, worth, and achievement or involve the recognition of these characteristics (George & Brief, 1992). Such events might include successfully completing a significant project, being treated with respect, being involved in what one considers meaningful work, and receiving an award or some other acknowledgment of achievement (Isen, Daubman, & Nowicki, 1987; George & Brief, 1992). According to AET individuals make appraisals of work events that stimulate a mood or emotion thereby impacting employee behavior (Weiss & Cropanzano, 1996). The AET model depicts work events as a catalyst to produce what is labeled as an affective reaction which is related to work attitudes and employee behaviors. These affective reactions are moderated by dispositions such as Positive Affectivity (PA) and Negative Affectivity (NA). According to AET, while attitudes such as job satisfaction and organizational commitment are considered cognitive judgments, affective experiences resulting from work-related events may also influence such judgments resulting in affect driven behaviors versus judgment driven behaviors.

Organizational Identification (OID)

Tajfel and Turner’s early research (1979) described social categorization, social comparison, and social identification as three processes that underlie social identity theory (SIT). Social categorization is the process by which individuals categorize others into groups in efforts to organize social information (Ellemers, De Gilder, Haslam, 2004). The second process, social comparison is the process by which a social categorization is invested with meaning (Ellemers, et al., 2004). Social comparison also can be defined as when people make comparisons to outside groups and they define the norms of their group according to a particular situation (Ellemers, et al., 2004). In other words, through social comparison, individuals place people, places and things in a paradigm of categorization and then evaluate their own individual
membership of that group based on how salient the group is to them in given situations. The third process, social identification, is the process by which information about social groups is related to self (Ellemers et al., 2004).

The inclination of a particular individual to perceive himself a representative of a group, will lead the person to assume the norms of the group to describe himself (Ellemers, et al, 2004). Also, due to a need for individuals to feel they have purpose, research shows that people may also identify more with groups with high status or power (Ellemers et. al, 2004). This social classification that occurs in social identity theory enables individuals to systematically define others and order the social environment (Ashforth & Mael, 2000). It also enables the individual to locate or define him- or herself in the social environment (Ashforth & Mael, 2001). Ashforth and Mael (1989) also note that the social- categorization process serves the purposes of (a) helping people make sense of their environment by defining others in relation to their group membership, and (b) enabling individuals to define themselves in comparison to other groups. People are then more likely to identify with a group with whom they share similarities, because their identification is based on how they categorize themselves as similar to those within the group (van Knippenberg & van Schie, 2000).

Turner (1978) demonstrated in various experiments where groups were created with minimal categorization, that when there is no category placed on them, participants artificially created in- group and out- group dynamics. This showed evidence that individuals in groups will create artificial divisions between themselves and individuals from other groups even when no observable differences are salient. This finding has been helpful in resolving inter-group bias in the workplace. One such example of how inter-group bias is resolved through an understanding of SIT is taken from what is known as the Robbers Cave study in which two groups of boys were camped out on different sides of the Robber’s Cave campgrounds unaware of one another (Sherif, Harvey, White, Hood, & Sherif, 1961, reprinted in 1988). Upon each group’s awareness of each other, they immediately began to create biases against each other for no salient reason other than the fact that they were in different groups similar. This study converged with later findings where it was discovered that intergroup biases can emerge merely due to group categorization (Turner (1978; 1984). At Robbers Cave the groups of campers created an in-group and out-group condition. However, the introduction of super-ordinate goals induced re-categorization of the camp groups and conflict between the two groups was ameliorated (Sherif et al., 1961; Gaertner, Dovidio, Banker, Houlette, Johnson, & McGlynn, 2000).

Re-categorization redefines an individual’s understanding of their group membership at a higher level of category inclusiveness (Allport,1954; Brown & Turner, 1981; Doise, 1978; Worchel, Axsom, Ferris, Samaha, & Schweitzer,1978). This process does not eliminate categorization but reduces intergroup bias by increasing the saliency of cross- cutting memberships. When group members are aware that they share membership qualities with members of another group on a different dimension it can improve intergroup attitudes (Urban & Miller, 1998). Gaertner, Dovidio, Anastasio, Bachman, & Rust (1993) found that using super-ordinate goals could be used as a re-categorization strategy to create a common in-group identity between different groups due to the increase in the saliency of the common super-ordinate
As a result the same biases and attitudes that produced in-group favoritism are redirected to the former out-group members who now share a common super-ordinate group identity (Gaertner et al., 2001). The application of these findings to organizational group dynamics can be very useful.

Ashforth and Mael (2000) conceptualized OID based on SIT (Knippenberg & Schie, 2000) proposing that OID is a specific type of social identification, and that, to the extent that an individual identifies with an organization, the organization provides the individual with a sense of identity. In other words, OID can best be described as the extent to which an individual’s values, beliefs, and identity is congruent with the organization’s as if the organization was a person. Such as with SIT, within OID, social or group identification may also exist merely due to the classification of one’s self with the organization (Ashforth & Mael, 1989) but can be weakened or strengthened based on various influences.

There are at least four factors that can increase social identification (Ashforth and Mael, 1989). First, social categorization occurs through the categorization of individuals. For example a woman may strongly identify with other women simply by mere social categorization, but identification with a specific woman may strengthen or weaken based on other criteria such as similar or dissimilar income or beliefs. Second, the prestige and distinctiveness of a group will make an individual more inclined to identify with that group. The same applies to members of the same religion or sports fans who like the same team. Third, the salience of out-group differences and potential conflict with out-groups will strengthen social identification. Lastly, factors traditionally associated with group formation such as shared goals, similarities, and common history may also affect the extent to which an individual identifies with a group. The propensity for social identification to occur within organizations is stronger under these conditions and in smaller groups versus larger ones. This demonstrates how an employee may also automatically identify with or strive to identify with the organization in many ways based on relationships with its members.

Organizational socialization

Socialization indirectly affects a person’s internalization of the values and beliefs of an organization by strengthening the social identification process, depending on the salience, stability, and consistency of the character of an organization (Ashforth & Mael, 1989). From this relationship one can posit that the character of the organization is an important element in the process involving OID. So how do we define socialization? According to the Blackwell Encyclopedia of Management (1997), the term “learning the ropes” is provided as a definition agreed upon by most scholars. Van Maanen and Schein (1979) propose three elements to socialization. First, they propose that learning new knowledge is important for both one’s own job performance and for general functioning in the organization. Second, socialization includes acquiring a strategic base, which is a set of decision rules for solving problems/making decisions. Lastly, it involves learning the organization’s mission, purpose, or mandate.

Another form of socialization, anticipatory socialization is the process of socialization prior to organization entry that can stem from an unlimited source of influences including family,
peers, religion, school, culture, race and the organization itself (Van Maanen, 1976). During this socialization process, organizational newcomers are highly concerned with building a situational definition in order to understand the norms of the organization while at the same time building a definition of themselves (Mael & Ashforth, 2001). What results is an identity comprised from both an employee’s definition of self and comprised from perceived expectations within the organization (Hogan, 1976; Van Maanen, 1976; Fisher, 1986). Describing the process of the emergence of identification, Ashforth (1985) suggests that situational definitions and self-definitions both emerge through symbolic interactions. Additionally, such interactions can be defined broadly as any symbolic transmission such as product advertisements or orientation sessions (Mael & Ashforth, 2001). Comparatively speaking, symbolic interactions perceived by an employee as elements of the socialization process may aid in the development of OID.

Organizational Justice

According to fairness theory, justice is an ideology that exists as a norm for human behavior and an expectation within society for interpersonal conduct (Folger, Cropanzano, & Goldman, 2005). Research has shown that even if individuals do not identify with the victim of an injustice, they still react behaviorally, attitudinally and emotionally (Folger et al, 2005). This behavior stems from what is termed as principled moral obligation (Folger et. al, 2005). Employees who hold this moral attitude may use what is termed as deontic logic (Cropanzano, Goldman, & Folger, 2003). Deontic logic is a person’s perspective which considers morals as a reason for being fair based on an exchange relationship or norm expectancies (Folger, 2001). Cropanzano et al. (2003) found evidence that suggests that “people seem responsive to a sense of moral obligation about following the guidance of deontological principles in addition to – and importantly, sometimes in opposition to – their instrumental and personal wants.” (pp.1020) In other words, individuals may already be pre-conditioned before entering their workplace environment to perceive and respond to fairness or injustice independent of any personal benefit based on principles they have developed outside of the workplace. Rupp et al. (2006) suggests that research demonstrates that employee attitudes and behaviors are heavily influenced by how fair they consider their organization’s actions to be and they may rely on fairness perceptions to form an image of their employer based upon issues of trust, respect, legitimacy, and integrity.

Deontic logic and fairness theory (Folger et al., 2005; Cropanzano et al., 2003) suggests that some individuals already innately have the ability to recognize the implementation of just principles when they see it. This could suggest that if the company for which an employee works is a socially responsible one, then that employee’s participation in employer directed volunteerism may increase his/her identification with the organization due to a perceived congruence in values. Take for example, an employee who volunteers for a not for profit agency on behalf of his/her organization may perceive employer directed volunteering to be 1) a symbolic interaction, 2) an opportunity for the employee to represent his/her organization in a
meaningful way, and 3) a service that brings value to the organization by enhancing its reputation. Additionally, employees may match their deontic values with those of an organization by asking the question, “How am I and my company similar?”, the degree to which the organization is socially responsible may be positively impact the OID of the employee.

Organizations that have a lot of contact between its employees and other organizations or external customers will have employees that are inclined to perceive the organization as a salient entity versus companies that have more interaction between employees within the company (Ashforth & Mael, 1989; Mael & Ashforth, 2000; van Knippenberg & van Schie, 2000; Ellemers
Employees that interact more often with external customers or other organizations will have a stronger identification with their organization due to its saliency. Similarly, employer directed volunteerism creates a strong situation for employees to focus and direct their energies toward an ideal, goal, or non-profit agency external to the organization. As a result, the saliency of the organization will become stronger than their individualism or work group.

Re-categorization, as discussed earlier, may reduce the saliency of differences between groups within the organization and increase the saliency of the organization as a whole by the introduction of volunteer projects as super-ordinate goals. In the Robber’s Cave study (Sherif et al., 1961), the groups of campers reduced bias and conflict due to intergroup cooperation on tasks that served to meet a common goal. As a result, Sherif et al. (1961) concluded that cooperative interaction enhances positive evaluations of out-group members because cooperation transforms the two separate groups into one group. Similarly, cooperation among employees participating in a volunteer effort to beautify a neighborhood by recycling trash or tutoring at a local youth center may also reduce intergroup biases within an organization by serving as a super-ordinate goal that re-categorizes separate work teams, departments, or work groups into one organizationally defined collective identity.

Proposition 1: Employer directed volunteering will reduce intergroup bias via re-categorization when used as a super-ordinate goal for the entire organization.

Stemming from AET, employer- led volunteering could be considered a work event that provides employees with a sense of achievement which could also lead to a feeling of self-worth or self-respect (Isen, Daubman, & Nowicki, 1987) which is synonymous with pride (Webster’s Thesaurus, 1993), a variant of the emotion joy (Weiss & Cropanzano, 1996). Employer directed volunteering not only allows an employee the opportunity to display a talent or skill in a unique activity setting, but it also enables the employee to offer benefit to a charitable or social cause. Based on the deontic needs of individuals and postulating from fairness theory, individuals possess an intrinsic desire to not only experience justice for themselves but also for others (Folger et al., 2005). Tajfel (1978) defined social identity theory as that part of an individual’s self-concept which derives from his [or her] knowledge of his [or her] membership of a group (or groups) together with the value and the emotional significance attached to the membership. The key term is emotional significance which explains how identification is also strengthened via affect. Allowing employees to participate in a volunteer activity during company time may induce a positive affective reaction in the form of the emotion joy. This positive affective experience may also serve as the emotional significance which is one of the factors from which an employee’s identification with an organization is derived. Additionally, factors such as the personal values and beliefs of the employee may increase the affective component within group dynamics thereby intensifying the member’s identification with a group.
Proposition 2a: An employee’s participation in employer directed volunteer programs will induce positive affect of the employee.

Proposition 2b: Positive affect of the employee will strengthen the OID of the employee.

External Variables As Moderators of Outcomes

Organizational support. Organizational socialization as defined earlier provides support and cues to the employee from leaders in the organization. To the extent that its value is perceived by the employee, organizational socialization may greatly impact how the employee identifies with the organization. During the organizational socialization process, the employee is oriented with the company including its purpose, mission, values, policies, and procedures. Firms with CEOs who uphold a strong identity of philanthropy are more likely to engage in corporate philanthropy (Dennis et. al, 2007). Furthermore, firm-level structures may be reflections of the CEO’s (and top management team’s) attitudes, beliefs, and values (Dennis et. al, 2007). This suggests that employer directed volunteerism will not occur if there is no CEO in place that values corporate social performance (CSP) or corporate citizenship. It has also been found that leader-member exchange is positively related to altruism (Podsakoff, 2000). Implicit “signals” like those from leadership and the organizational climate, and explicit ones such as rules and regulations, and company activities also impact the socialization process.

An important way through which the character of the organization can be expressed to the employee is through communication and providing organizational support. Therefore effective communication from leadership encouraging volunteering may also influence affect and OID. When the employee receives signals from either leadership, the climate of the organization, and/or through the firm's socialization process that implies the organization is socially responsible to its environment and community, the employee may internalize it thereby increasing identification with the organization. If the employer does not offer those signals then the employee may not be given the opportunity to identify with the organization at a stronger level based on the organization's philanthropic involvement.

Proposition 3a: The relationship between employer directed volunteerism and affect may be positively moderated by perceived organizational support via communication and leadership.

Proposition 3b: The relationship between employer directed volunteerism and OID may be positively moderated by perceived organizational support via communication and leadership.

It has also been found that when supervisors treat employees fairly, social exchange and the norm of reciprocity (Gouldner, 1960) dictate that employees reciprocate. In support of Rupp et. al’s (2006) use of organizational justice framework to explain the underlying attitudes of employees towards CSR, employee voice or choice may also moderate the relationship between an employee’s participation in volunteerism and affect. An employee’s right to choice or voice regarding which volunteer activity their company will support may moderate their level of
affective reaction because it may influence their perception of both the organization’s value for its employees and social ideals. If the employee perceives that his/her opinion matters, then dimensions of positive affect such as pride or respect for the organization may increase. I posit that when an employee is given either voice or choice regarding employer directed volunteer projects, then that employee may experience a higher level of positive affective reaction as opposed to having no voice or choice input at all.

**Proposition 4:** The relationship between employer directed volunteerism and affect may be positively or negatively moderated by voice or choice.

**Task significance.** There are factors related to task significance which may moderate an employee’s OID or affect when engaging in employer directed volunteerism. If an organization is known for its commitment to social causes, employee participation in volunteerism holds more value and an employee might view this as an opportunity to gain recognition or attention. This could induce a positive affective state and guide him/her to identify more with the organization because such affiliation may be perceived as prestigious and a way to assist him/her in achieving success within the company. Comparatively, if the volunteer activity is one that carries a highly visible profile, like for example organizing and running a fundraising campaign, the person might feel more confident in the outcome of gaining attention and recognition and view the activity as an opportunity for self development (Bussel and Forbes, 2001). According to AET this may lead to a positive affective state (Weiss and Cropanzano, 1996) as the volunteer project may be considered by the employee to be an activity that could result in beneficial outcomes for the employee. On the contrary, if the volunteer activity is one which involves less visibility and responsibility such as walking a marathon with thousands of other employees, the individual may not exhibit as strong of a positive affective state as they would if engaged in a highly visible and influential role. Since high profile roles resemble more of a leadership role, employees will also be more inclined to pursue those opportunities based on their perceived ability to perform the related tasks and the perceived rewards associated with it. Some high-profile employer directed volunteerism may also include face-time with the CEO or other high level managers. Such opportunities may also increase affect of an employee based upon their perceived value of the opportunity.

**Proposition 5a:** The strength of the relationship between employer directed volunteerism and affect will be moderated by the employee’s perceived significance, perceived employee visibility and employee profile importance associated with employer directed volunteerism.

**Proposition 5b:** The strength of the relationship between employer directed volunteerism and OID will be moderated by the perceived employee visibility and employee profile importance associated with employer directed volunteerism.

CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

Practical Implications
This model serves many purposes for organizations. First it signals to employers that identifying an applicant’s attitude towards employer directed volunteerism may affect how well they will fit within the organization if it is a socially responsible one. Secondly, this model can be used as a stepping stone towards researching dimensions of organizational justice as it relates to what level of volunteerism an organization can effectively participate in without adversely affecting employee attitudes and emotions. The attitudes and beliefs of employees need to be considered when implementing CSR activities or else an organization risks losing them. As mentioned earlier, employee voice and choice may be deemed quite important when selecting a social cause to support. The firm’s decision may impact the emotions and attitudes of employees, and the risk of a decline in a positive employee perception of the company should be considered as well as minimized.

Third, if employer directed volunteerism can induce a positive mood or emotion within an employee, the organization may experience a range of benefits as it pertains to employee job satisfaction and performance. According to Bower (1981) the type of affective disposition one holds can influence that person’s thoughts, attitudes, and behaviors. People in good moods can recall information better, provide better quality service, and are more helpful (George and Brief, 1992). People in positive moods also are more likely to be attracted to others and wish to maintain their positive mood (George and Brief, 1992), and may do so by increasing their helping behaviors or protecting the organization (George and Brief, 1992). All of these qualities are necessary for the effectiveness of an organization, and volunteerism is an activity in which productive employee behavior may thrive. Affect may likely also influence the processes underlying motivation (Seo et. al, 2004). In other words, the ability to prime a positive emotion, as proposed by the model, would be very helpful for an organization as a tool to assist with motivation and overall performance.

Fourth, this model may potentially be used as strategy to reduce intergroup conflict within the organization. Based on the model and SIT, intergroup conflict may be reduced through re-categorization as a result of introducing employer directed volunteering as a superordinate goal. Lastly, contextual elements, plausibly such as the symbolism and the altruistic nature of such CSR activities, may enhance OID and possibly serve as the conduit for other behaviors such as organizational commitment (OC) to develop (Ashforth & Mael, 1989; Mael & Ashforth, 2001). This is an important proposition because OID, according to Knippenberg and Schie (2000), may be an important precondition for general feelings of job satisfaction, and members that identify with an organization may be more likely to stay with an organization and exert effort on its behalf.

**Future research**

I have demonstrated how AET and the social identity approach may be used to develop a conceptual model for understanding the potential consequences for organizations that offer
employer directed volunteer activities. The majority of the literature that empirically examines social identification and intergroup conflict consists of lab studies, and the limited numbers of field studies that have been conducted are not very specific to philanthropic events that occur within the organizational context. Future research should examine if other CSR activities and acts of philanthropy such as corporate gifting or fundraising by employees could serve as a super-ordinate goal to increase OID and reduce intergroup bias. Additionally, further research should be conducted to determine to what extent other work activities induce emotions and OID among employees.

The effect that employer directed volunteerism has on intra-group dynamics should also be given further examination. A social identity perspective would predict that if workers within a group or team participate in an employer directed volunteer program, they may identify strongly with their teammates and become more energized on behalf of the group (Ellemers et al., 2004). As a result, the implementation of employer directed volunteering within a group may affect detrimental group outcomes such as social loafing since a highly cohesive group displays less social loafing than a group composed of strangers (Williams, Karau, & Bourgeois, 1993).

I suggest using a longitudinal design to test the relationship between volunteering and the level of intergroup bias/conflict, OID, and affect with volunteering as a dichotomous independent variable (volunteer/ do not volunteer) and the remaining variables as the dependent variables. In a field study, employees who work at an organization that offers employer directed volunteering could be identified with assistance from a not-for-profit organization such as Habitat for Humanity. Ideally such not-for-profits schedule employees of firms with which it has relationships to volunteer according to a pre-determined schedule. Employees would be measured on the dependent variables at time 1 before they volunteer and at time 2 directly after they volunteer, and the change in levels of the dependent variable could be observed. Other demographical information such as age, gender, and race will serve as control variables.

Regarding proposition 3 through proposition 5, a suggestion for future research is to create a paper people lab experiment using a narrative of a workplace scenario and to measure the attitudes of participants presented with the option of volunteering on behalf of their organization. The attitude measured would include the participant’s level of OID and positive affect. The dichotomous condition of either choice (choice vs. no choice) or voice (voice vs. no voice) could be included as moderators and manipulated in the narrative script. Additionally, perceived organizational support or perceived task significance could also serve as a second moderator, and the interaction of all the aforementioned variables could be investigated to determine its effect on the OID and affect of the participant. If findings from these recommendations for research are conclusive, it may shed light on how specific work activities may be used as a strategy to reduce intergroup conflict, create an environment of positive affect, as well as set the foundation for managing other behaviors like turnover, commitment, and overall performance.
REFERENCES


MAINTAINING AUTHENTICITY ACROSS MULTIPLE WORK CONTEXTS: A MODEL OF THE CREATION AND DEVELOPMENT OF CAREER REPUTATIONS

S. Gayle Baugh, University of West Florida, gbaugh@uwf.edu
Sherry E. Sullivan, Bowling Green State University, ssulliv@bgsu.edu

ABSTRACT

This paper utilizes a social constructionist perspective in order to begin to build a framework for the development, enhancement, and maintenance of a career reputation. A career reputation is instrumental in obtaining both objective and subjective career rewards. The focus in this paper is primarily on the congruence among self-perception, self-presentation, and career reputation and the influence of congruence or lack of it on the ability to present an authentic self. Several propositions are offered as well as more general directions for future research on career reputation, including its effects on career development.

INTRODUCTION TO CAREER REPUTATIONS

"Regard your good name as the richest jewel you can possibly be possessed of—for credit is like fire; when once you have kindled it you may easily preserve it, but if you once extinguish it, you will find it an arduous task to rekindle it again. The way to gain a good reputation is to endeavor to be what you desire to appear."  Socrates

Individuals develop resumés and biographical statements in order to shape their reputation. But there are other, less controllable influences on one’s reputation. From intra- and inter-office gossip to social networking websites such as Facebook, reputations are in a constant process of being created or re-created, maintained or enhanced, and redeemed or destroyed. A person’s reputation, simply defined as the public’s opinion of that individual, is an important element in social interactions. For example, employers check references to gather information regarding the reputation of job applicants, many civic organizations (e.g., Rotary International) impose the requirement of “a good reputation” for membership, and the US legal system permits an individual to sue for defamation in order to exact compensation for the loss of a good reputation. With the increased access and availability of information as a result of the Internet and related technologies, it has become increasingly difficult for individuals to manage their reputation. This difficulty is especially apparent in dealing with past indiscretions and mistakes, which often leave a permanent record in cyberspace.

Within the management literature, reputation has been examined primarily at the macro level; scholars have studied how corporations build and maintain a reputation as a means of
competitive advantage (Barnett, Jermier, & Lafferty, 2006; Gioia, Schultz, & Corley, 2000). Studies of corporate reputations have investigated how a firm’s reputational crisis may spill over and affect other firms (Yu & Lester, 2008), how management of a company’s reputation may influence decisions about choice of suppliers or outsourcing (Weiss, Anderson, & MacInnis, 1999; Wright, Smith, & Wright, 2007), and strategies used by small businesses (Goldberg, Cohen, & Fiegenbaum, 2003) and business schools (Vidaver-Cohen, 2007) to build a reputation. Research has found that a number of benefits accrue to companies with a positive reputation, including being able to charge premium prices as well as being better able to attract investors and high quality job applicants (Fombrum & Shanley, 1990). While there have been many studies of reputation at the organizational level, there has been relatively limited conceptualization (Zinko, Ferris, Blass, & Laird, 2007) and little empirical attention (e.g., Chan, Suen, & Choi, 2008; Wasko & Faraj, 2005) to the construct at the individual level of analysis.

The purpose of this paper is to use a micro-level lens to begin to build a social constructionist framework for the development and maintenance of career reputations (Cohen, Duberley, & Mallon, 2004). Specifically, we consider how career reputations are created and changed over the course of an individual’s life span across various work contexts. We specifically focus on how an individual remains true to himself or herself (i.e., remains authentic) while simultaneously investing time in creating a career reputation. This framework explicitly recognizes that the building and development of a career reputation is a socially embedded process. An individual’s reputation results from the dynamic interplay between the desire to manifest one’s true “self” and pressures emanating from interactions with relevant others. Further, the career reputation evolves in response to these dual influences over time.

The study of career reputations is important because public opinions may impact important career outcomes, including obtaining employment or project work, performance evaluations, opportunities for training and advancement and compensation. Previous studies have found that a positive reputation can benefit the individual in numerous ways. A person with a good reputation usually benefits from increased status, respect and approval from others (Rosen, Cochran, & Musser, 1990; Wasko & Faraj, 2005). Those with a good reputation may be perceived to be more trustworthy and more competent (Hall, Blass, Ferris, & Massengale, 2004) and they may experience less exhaustion, tension and uncertainty (Hochwarter, Ferris, Zinko, Arnell, & James, 2007). Those with a positive reputation may also have higher job satisfaction, more decision latitude, greater autonomy and more power (Laird, Perryman, Hochwater, Ferris, & Zinko, 2009).

To effectively examine the process of building and maintaining a reputation, we need to draw from several streams of research. We consider the organizational entry process, including how an individual is socialized and receives feedback in an effort to enforce company norms
Identity development, including the process by which identity, self-perception and self-presentation are influenced by feedback (e.g., Pratt, Rockmann, & Kaufmann, 2006; Roberts, 2005; Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005) and the related construct of authenticity, especially how the need for authenticity (i.e., to be true to oneself) influences career decision making (Mainiero & Sullivan, 2005, 2006) are also discussed. Finally, conservation of resources theory is invoked to suggest how individuals will allocate time in reputation building and maintenance (Hobfoll, 1989, 2002).

The paper begins by examining how the term reputation has been defined. Next, the development of a model of career reputations is discussed, with special attention to how an individual’s need for authenticity influences the reputation creation and development process. Finally, implications of this model for research and practice are detailed.

WHAT IS A REPUTATION?

Although the term “reputation” is frequently used in everyday interactions, (e.g., “she has a reputation for always coming through in a crunch”; “he has a reputation for being difficult to work with”), there is no consensus among scholars upon the definition of a reputation (Barnett et al., 2006; Melewar & Jenkins, 2002; Whetten & Mackey, 2002). For example, Bromley (2001, p. 317) suggests that reputation is “...a distribution of opinions (the overt expressions of a collective image) about a person or other entity, in a stakeholder or interest group.” Zinko and colleagues (Zinko et al., 2007) suggest a reputation “… is a perceptual identity formed from the collective perceptions of others, which is reflective of the complex combination of salient personal characteristics and accomplishments, demonstrated behavior, and intended images presented over some period of time as observed directly and/or reported from secondary sources, which reduces ambiguity about expected future behavior.” Anderson and Shirako (2008, p. 320) define reputation “…as the set of beliefs, perceptions, and evaluations a community forms about one member.”

These definitions of a reputation share some common themes. First, most of the definitions of a reputation speak to the collective judgment of others. A reputation is based on the perceptions of others and may or may not reflect the focal person’s self-perception or intended self-presentation. Second, a reputation is an assessment by others of an individual’s characteristics, behaviors and communications over time. Assessments may be based on first hand information, observation and interactions with the focal person. In addition, assessments may also be based in whole or in part on information gleaned through secondary sources, including others’ accounts of interactions with the focal person as well as information gleaned from archival sources such as the Internet. Thus, the information gathered may or may not align with the information the focal person has self-presented or that he or she believes is relevant for use in such assessments. Like
any interpersonal communication, the process of the development of reputation is subject to
distortion and other problems typically associated with human interactions (Kenny, 2004;
Sanbonmatsu, Posavac, Kardes, & Mantel, 1998). Third, because the assessment of reputation is
done by others, the focal individual may or may not be fully aware of the nature of his or her
own reputation. Based on the previous literature, we suggest the following definition of a
reputation:

_The collective evaluation of the focal person by an interest group based on information
perceived as relevant by that group._

Applying this definition of a reputation and drawing on research on corporate (Barnett et al.,
2006) and individual reputation building (Zinko et al., 2007), the process of building and
maintaining a reputation can be simply summarized as:

Identity → Image → Reputation → Outcomes

The process of creating and maintaining a reputation begins with the person’s identity or his or
her self-perceptions, i.e., Who am I? How am I different from and similar to others? Based on
this understanding of self, the individual develops a self-presentation, or a self-image that he or
she attempts to project to an interest group. An interest group has a relationship with or a
commitment to the focal person. This group is willing to devote the time and effort needed to
monitor and observe a focal person over time. Interest groups are willing to make this investme
of time and energy because a person’s reputation may provide insights into that individual’s
expected future behaviors (Yu & Lester, 2008; Zinko et al., 2007). Knowledge of a person’s
reputation may benefit a group, for example, by providing the group with accurate expectations
with respect to the individual’s contributions to team efforts or a competitive edge in
negotiations with that individual (Barry & Stewart, 1997).

Based upon observations of the focal person as well as information gleaned from other sources,
the interest group assesses the individual in order to form a collective opinion of that person. If
some sort of consensus is achieved, then this collective opinion is the focal individual’s
reputation within this specific interest group. If the reputation is positive, various outcomes,
including increased status, respect, approval from others (Rosen et al., 1990; Wasko & Faraj,
2005), job satisfaction, decision latitude, autonomy and power (Laird et al., 2009) may accrue to
the focal individual. When invoked in the presence of the individual or for the individual’s
information, this reputation provides feedback as to how his or her image is construed by
relevant others.
In this section, we have provided a brief summary of the various definitions of a reputation and have introduced a simple model which summarizes the reputation process as discussed in the previous literature. In the next section, we will expand this model and examine how a person’s need for authenticity, in other words, the need to remain true to himself or herself, influences how the focal person may use feedback from an interest group.

**THE EFFECTS OF FEEDBACK AND AUTHENTICITY**

In Figure 1, we offer an expansion of the four part reputation model previously discussed. The first key change to the model is explicit identification of the influence of feedback on the reputation process. The second key change is the inclusion of authenticity as a moderator of feedback upon the focal person’s self-perception and self-presentation.

First, as depicted in the expanded model (see Figure 1), the reputation process is dynamic. As an individual learns about how others have evaluated him or her, the individual may use this information to reconsider his or her self-perception and to perhaps enact changes in self-presentation. There is a large literature that suggests that individuals use feedback as a means of recognizing the need for the change and of deciding what types of changes may be beneficial. For example, newcomers utilize feedback from more experienced organizational members in an effort to learn about company rules and procedures as well as to facilitate conforming to group norms (Gagnon, 2008; Schein, 1978; Wanous, 1980). Further, feedback sent to the focal person regarding improved competencies (e.g., increased knowledge, skills and abilities) may cause the person alter his or her self-perceptions and self-presentation (Roberts, 2005). If these changes are noticed by an interest group, the individual’s reputation may change to reflect these enhancements, thus completing the cycle. A similar feedback process occurs when negative feedback is provided to the individual. However, research has demonstrated that individuals are more likely to accept and act upon positive rather than negative feedback (Conlon, 1980; Steelman & Rutkowski, 2006; van Emmerik, Bakker, & Euwema, 2008).
In sum, because feedback may influence, either in a negative or positive direction, a focal person’s self-perception and self-presentation causing an interest group to subsequently reassess the individual’s reputation, we offer the following proposition:
**P1:** An individual’s reputation is dynamic and changes over time.

When a focal person learns of his or her reputation, this feedback may cause an alteration in self-perceptions, but only if such alterations are in keeping with the individual’s sense of authenticity (i.e., need to be true to oneself). We suggest that the construct of authenticity should be a critical part of a discussion of the process of the building and development of a career reputation (see Figure 1). The construct of authenticity has been used in a number of literatures within the field of organization studies, including leadership and organizational learning (Mazutis & Slawinski, 2008), professional image construction (Roberts, 2005) and career theory (Sullivan & Baruch, 2009). For purposes of this paper, we focus the definition and use of authenticity within the careers literature (Hall, Gardner & Baugh, 2008).

Within the careers literature, authenticity is often viewed as a crucial component of one’s career identity (e.g., Svejenova, 2005). It is also one of the three major foci within the Kaleidoscope Career Model (KCM) (Mainiero & Sullivan, 2005, 2006). In this model, individuals focus on three career parameters when making career-related decisions, thus producing a kaleidoscope-like pattern. These parameters or motivators are: (1) **authenticity**, in which the individual makes choices that permit him/her to be true to him/herself; (2) **balance**, whereby the individual strives to reach an equilibrium between work and nonwork (e.g., family, friends, elderly relatives, personal interests) demands; and (3) **challenge**, which is an individual’s need for stimulating work (e.g., responsibility, autonomy) as well as career advancement (see Sullivan & Baruch, 2009, for a review). While all three parameters are present and active throughout the career, the strength of a parameter to shape a career decision depends on the external circumstances and pressures in the individual’s life at that time.

According to the KCM, authenticity is a key factor that influences career decisions over the life span. Research has demonstrated that individuals who act in authentic ways experience more positive career outcomes such as job satisfaction and fulfillment than do individuals who do not act in an authentic manner (Mainiero & Sullivan, 2006). Authenticity is key to a person’s self-concept. Therefore, people will use feedback in the form of a reputation to alter self-perceptions if that feedback permits the individual to remain true to himself or herself. We offer the following proposition about the relationship between feedback and self-perceptions as moderated by authenticity:

**P2:** The use of feedback by the focal person to alter his or her self-perceptions is moderated by the individual’s need for authenticity. Specifically, feedback that supports one’s authentic self is likely to be acted upon, whereas feedback that fails to support one’s authentic self is less likely to be acted upon.
According to the KCM, authenticity along with the parameters of balance and challenge are simultaneously active and work together to create the pattern of a person’s career, although at any given time one parameter will be primary and the other two secondary. A person may make tradeoffs among these parameters when deciding among career alternatives depending upon the conditions in of his or her work and personal life at that particular point in time. We suggest that when a focal person is offered feedback in the form of reputation, if the feedback suggests that there is a lack of congruence between external assessments of the individual and his or her internal or authentic self, then he or she is unlikely to alter identity or self-image in response to the feedback. Instead, the individual may alter self-presentation and make use of political skills in order to support the appearance of compliance with that feedback, if there are potential benefits in maintaining or enhancing the reputation that is held by an important interest group. For example, Gagnon (2008) discusses how individuals may respond to organizational controls in the form of a management development effort by either engaging in work on self or enacting required self. While some may conform by changing their actual self-perceptions, others may appear to conform (e.g., outward expression of norms, “talking the talk”). Likewise, Mehra and Schenkel (2008) detail how those who are high self-monitors carefully assess the situation and adapt their self-presentation to reap benefits from a given situation (Snyder, 1974).

Altering self-presentation may cause the individual to experience discomfort if that self-presentation is not in alignment with his or her authentic self. For example, high self-monitors (chameleons) may experience higher role conflict than individuals who are low self-monitors and do not readily alter their self-presentation to fit the situation (Mehra & Schenkel, 2008). This discomfort in terms of presenting a less than authentic self to others, however, may be mitigated by the natural tradeoffs that occur among the authenticity, balance and challenge parameters as described by the KCM. An individual may, for example, reduce his or her need for authenticity if such a reduction will facilitate fulfilling needs for balance or challenge. Thus we suggest the following proposition:

**P3:** Using reputational feedback that would require the person to change in a way that is inauthentic is unlikely to influence self-perceptions. Instead, the focal person is likely to alter his or her self-presentation in order to preserve the reputation without internalizing the changes suggested by the feedback.

In this section we have examined how a focal person may react to an interest group’s assessment of his or her reputation as evidenced by feedback provided by the interest group to the focal individual. We have also examined how authenticity may moderate the relationship between feedback and self-perception and self-presentation. We contend that individuals are more likely to alter self-presentation rather than the self-perceptions. While sustaining self-presentations or outward appearances that are inauthentic may cause stress, that relationship may be mitigated by the interaction of authenticity with challenge and balance as predicted by the KCM.
Thus far we have discussed the reputation process in terms of the focal person’s interaction with one interest group. However, in reality people interact with many different interest groups. The navigation of reputational feedback from multiple interest groups is examined in the next section.

REPUTATION, AUTHENTICITY AND MULTIPLE INTEREST GROUPS

So far we have discussed the reputation process in a fairly simplistic manner when in reality it is highly complex. As illustrated in Figure 1, a focal person is likely to interact with more than one interest group. For instance, an accountant may interact with multiple constituents. Within his or her employing organization, the accountant may deal with constituent groups including upper management, coworkers, support staff and various clients. External to firm, the accountant may interact with others in his or her profession, with fellow members of professional organizations and with members of the local community (e.g., Chamber of Commerce). Within each of these groups, the focal individual has a specific reputation (Bromley, 2001).

The reputation of the individual held by one interest group may be very similar or very different as compared to the reputation held by another group depending upon a number of factors. For instance, differences in assessed reputations may occur when different interest groups use dissimilar information to form their assessment of the same focal person (Sanbonmatsu et al., 1998). Also, the time and energy devoted by the different interest groups to monitoring the focal person is likely to vary. Over time, interest groups may move in and out of the focal person’s life or the relevance of the relationship between the focal person and the interest group may change. Because individuals are likely to interact with more than one interest group, we suggest the following proposition:

**P4: An individual has multiple career reputations.**

Accepting the premise that individuals have more than one career reputation, the question arises as to how potential conflict among the different reputations is resolved by the focal person. Take for example the case of university professors. Professor X has more of his or her work identity invested in the role as a university employee and works within a teaching-focused university. Professor X will probably devote more resources to supporting an image as a dedicated teacher. While Professor X has a highly positive reputation within the university, his or her reputation among scholarly peers may be less so. In contrast, Professor Y, who also is employed by a teaching-focused university, has more work identity invested in his or her role as a professional in the discipline. He or she deems scholarly peers as the most important interest group that he or she interacts with and as a result devotes more resources to sustaining the image of a scholar producing high quality research. Professor Y has a highly positive reputation among his or her
scholarly peers but is accorded only an average reputation within his or her employing university. While it is not impossible for Professor X or Y to have highly positive reputations among all their interest groups, developing and maintaining such reputations may be exceedingly difficult, given resource limitations (Hobfoll, 2002).

To understand how individuals negotiate the role conflict (e.g., meeting expectations of one interest group may hinder the individual’s ability to meet the expectations of another interest group) resulting from the reputation process, we consider the conservation of resources (COR) theory. According to COR theory, individuals strive to acquire and maintain resources, with actual or perceived loss of resources resulting in stress and emotional discomfort (Hobfoll, 1989; 2002). Resources may include an individual’s time and energy as well as political skills (Jawahar, Stone, & Kisamore, 2007).

Focal persons invest time, energy and other resources into presenting a self-image to various interest groups with the expectation that these investments will result in outcomes. If reputational feedback indicates that a greater investment of resources is needed for the interest group to more favorably assess the individual and provide better outcomes, then the individual must determine if the benefits of the investment exceed the cost. For example, change is more likely to occur when self-perception exceeds reputation within a particular interest group and this discrepancy will produce a significant reduction in the benefits the focal individual receives from the interest group (Roberts, 2005).

For each interest group the individual interacts with, he or she must determine if there is a discrepancy between his or her authentic self and the assessed reputation. If so, then he or she must determine if the costs of enacting change either to self-perception or self-presentation exceed the benefits. As the number of interest groups the individual interacts with increases, the likelihood that the reputations assessed by each group will conflict also is likely to increase. In the case in which appeasing one interest group may damage the reputation assessed by another group, the individual will choose the action which will produce the greatest benefits in relation to the costs involved. Thus, we suggest the following proposition:

**P5:** Individuals will use reputational feedback to enact a change in either self-perceptions or self-presentation if the benefits of making that change exceed the costs.

**P6:** If reputational feedback from different interest groups is in conflict, the individual will make changes based on the feedback of whichever group will provide him or her greater benefits relative to costs.
In sum, the resolution of discrepancies illustrates how an individual may consider making changes to his or her self-perception and self-presentation, depending upon relative costs and benefits. While previous research has offered somewhat static definitions of self-perception and reputation, suggesting that these constructs have a more enduring nature, recent research suggests that these concepts are probably more dynamic and fluid (Barnett & Hoffman, 2008; Barnett et al., 2006) and future research should study them as such.

**IMPLICATIONS FOR FUTURE RESEARCH**

Although organizational scholars have begun to examine corporate reputations, relatively little research has been completed on career reputations. This paper offers a conceptualization of career reputations that draws from a number of research streams (e.g., careers, authenticity, and conservation of resources). While this paper expands upon a basic model of the building and maintenance of reputation, there are additional factors that the model does not take into account, which suggest further avenues for future research.

First, while the model presented in this paper suggests that interest groups may use information from both primary and secondary sources as the basis for making assessments about a focal person’s reputation, a greater investigation of this aspect of the process of building a reputation is needed. For example, the focal person’s self-presentation may not be received by the anticipated audience exactly as intended. Interest group members’ observations and impressions may be distorted by many factors, including selective exposure, selective interpretation of events, selective recall of behavior, and attributional biases (Zinko et al., 2007). Also, the interest groups may vary in extent of access to the focal individual as well as in their susceptibility to communication from the individual (Bromley, 2001). Thus, despite an individual’s use of various tactics (e.g., impression management, political skills; Blass & Ferris, 2007) and the investment of resources in an effort to enhance his or her reputation, the individual still has limited control over that reputation (Bromley, 2001). More attention to the actual process by which interest groups interpret the self-presentation of an individual in relation to other information sources is needed. Further, the relative weight that is accorded to primary and secondary sources of information over time should be explored.

Second, the effect of congruence between self-perception and career reputation is deserving of greater investigation. In this paper it is suggested that congruence between self-perception, self-presentation, and career reputations is important for those individuals who are motivated by a need for authenticity. There are interesting questions about the effects of incongruence among these elements. How much inconsistency can be tolerated? How do individuals become aware of such inconsistencies—do they actively pursue information to confirm the effects of self-presentation or is awareness a chance event? What determines the actions that individuals will
take in order to resolve discrepancies? Are these actions influenced, as we suggest, by career motivations, and most specifically, by the need for authenticity?

Third, in this paper we have focused on the idea of career reputations, suggesting that each interest group that the focal person interacts with may have a different assessment of that individual’s career reputation. This idea may be especially relevant to current career theory given that it has been suggested that more individuals are following nontraditional career path that are likely to include the crossing of multiple physical boundaries (e.g., between industries, professions, functions, countries) (Arthur, 2008; Arthur & Rousseau, 1996; Sullivan & Arthur, 2008) and interacting with more potential interest groups. The process of building and maintaining positive career reputations across multiple groups is likely to increase in complexity as the number of interest groups increases. Significant variation in the quality of the reputation across interest groups further complicates the picture. If feedback suggests changes in self-perceptions or self-presentation, an individual’s choice of actions will be influenced by whether these changes would be inauthentic for the individual, requiring additional assessment on the part of the individual. How individuals negotiate the role demands of various interest groups and how this negotiation process impacts the person’s satisfaction, well-being and stress levels are also potential areas for future study.

Fourth, while we have noted that the personality variable of self-monitoring may influence the process of formation, enhancement and maintenance of a career reputation, other individual difference or situational variables may play an important role as well. For example, how well known a person is in his or her community may have important implications for reputation. Studying the reputations of MBA students after a negotiation process, Anderson and Shirako (2008) found that a person’s visibility moderated the relationship between past behavior and reputation. The link between behavior and reputation was stronger for persons who were more well-known and who received more social attention in the community. For individuals with low visibility, behavior had little impact on reputation. An important issue illustrated here is the limited attention that individuals can invest in members of their community. As a result, some reputations may be based upon actual observation, whereas others may be predicated primarily upon rumor and gossip.

An intriguing question for future study arises with respect to the cost and benefit of high social visibility for reputation and especially for recovery after a career mis-step or a social blunder. For instance, if reputations of highly visible individuals are based more upon first hand observations of behaviors, are those reputations harder to change? If one is highly visible, how is behavior inconsistent with reputation interpreted by observers? It is quite possible that inconsistent behavior is interpreted simply as an anomaly, leaving reputation unchanged, much as stereotype inconsistent behavior often leaves stereotypes unchanged (e.g., von Hippel,
Sekaquaptewa, & Vargas, 1995). However, high visibility may also mean that inconsistent behavior becomes much more salient and more quickly results in a changed (and in some cases damaged) reputation. Perhaps individuals with low visibility are able to engage in poor behaviors with less (or no) impact upon their reputation as compared to those with high visibility. Clearly, the relationship between visibility and reputation management is an area for further investigation.

Fifth, additional research is needed on how the reputation developed early in an individual’s career influences career behavior, outcomes and subsequent reputation. The classic study by Berlew and Hall (1966) on early job challenge and expectations suggests that events occurring early in the career, such as early reputation formation, might have lasting effects on later career outcomes. For instance, Chan and associates (2008) found that high ability artists tended to start their career in mainstream markets while those with less ability started in less competitive fringe markets. As reputations diminished, it was easier for those with mainstream reputations to move into fringe markets than it was for those with fringe reputations to move into the mainstream market. It remains to be seen if one is a captive of one’s early reputation or if there is latitude for major change later in one’s career. Likewise, an examination of how an individual repairs a damaged reputation is needed, especially if such damage occurs early on. Is it possible to recover from severe damage to one’s image or are some reputations beyond repair? The research on managerial “derailment” would be relevant here (e.g., Gentry & Shanock, 2008; Lombardo, Ruderman, & McCauley, 1988).

Sixth, the limited research and conceptualization that has been completed on reputations has tended to view the process within a traditional work environment. How reputations are built and maintained for those enacting their career in less traditional work environments (e.g., project workers, virtual employees, independent contractors) or who move in and out of the workforce for reasons of personal responsibility or desire for fulfillment (e.g., Wang, Adams, Beehr, & Shultz, 2009) may offer interesting insights on the reputation building process.

Seventh, an additional area for future study is how one’s association with others impacts reputation. Kilduff and Krackhardt (1994), studying reputation within one’s organization, found that personal reputation was influenced at least as much by association with others as actual job performance. How much of an effect does an association with others have on the reputation attributed by external groups? What are the relative effects of association with an individual with a positive versus a negative reputation? Under what circumstances does reputation within one group affect reputation within another? To what extent does membership overlap between interest groups affect the ability to manage one’s reputation?

**IMPLICATIONS FOR PRACTICE**
Because past research has indicated that those with positive reputations reap benefits, including enhanced status, respect and approval (Wasko & Faraj, 2005) as well as increased job satisfaction and less tension and exhaustion (Laird et al., 2009), it behooves individuals to take action to monitor their reputations and use effective tactics to project images that reflect their self-identity. Individuals can engage in time efficient, low cost methods, such as setting automatic Google alerts to monitor the appearance of one’s name in print or electronic media. If a person finds that he or she is developing a negative reputation with an important interest group, it may be worth the expense to engage the services of a consultant to assist in the damage control or recovery process.

Moreover, individuals need to consider how others may observe and interpret their behaviors and communications and how these observations may affect their reputation. For instance, many companies now visit job applicants’ “Facebook” and other social network websites in order to learn more about the candidates. Individuals should consider how photos and other information may present an unflattering image to others. Likewise, managers and organizations should consider how customer evaluations offered on websites not sponsored or sanctioned by the company (e.g., walmartspeakout.com; ratemyprofessor.com) may impact reputations. Despite limited resources and potential conflicts among interest groups on the criteria used to evaluate, individuals should still carefully consider and plan what image they wish to present to others.

REFERENCES


STRATEGIC ORIENTATION OF BUSINESS ENTERPRISES (STROBE)
AND BUSINESS PERFORMANCE:
THE MODERATING ROLE OF ORGANIZATIONAL CULTURE

Orlando C. Richard*, University of Texas at Dallas, pretty@utdallas.edu
Hao Chen, University of Texas at Dallas, chloechenhao@utdallas.edu
Shahid N. Bhuian, The American University in Cairo, sbhuian@aucegypt.edu
Ken Chadwick, Nicholls State University, ken.chadwick@nicholls.edu

ABSTRACT
We provide additional validation of the Strategic Orientation of Business Enterprises (STROBE) measure by confirming its factor structure and linking it to objective and subjective measures of business performance. After comparing six, five, and four factor structures we determine that a four-factor structure consisting of aggressiveness, analysis, proactiveness, and riskiness provides the best goodness-of-fit and highest level of predictive validity. In addition, organizational culture was found to moderate the relationship between the STROBE dimensions and firm performance. Specifically, a clan culture positively moderates the relationship between both analysis and proactiveness and firm performance while significantly weakens the negative main effects of both aggressiveness and riskiness on firm performance. We also offer implications for future research.

INTRODUCTION
Twenty years after the Strategic Orientation of Business Enterprises (STROBE) dimensions were established, we revisit the original model (Venkatraman, 1989) and provide additional validation of the STROBE measure by confirming its factor structure, linking it to objective and subjective measures of business performance, and accounting for the role of organizational context. Since STROBE dimensions capture the actual strategic orientations of firms, it enriches the scope of strategy studies. Different models have been tested using STROBE dimensions (Davis & Walters, 2004; Lefebvre, Mason, & Lefebvre, 1997; Tan & Litschert, 1994). However, the existing studies have overlooked the boundary conditions between STROBE dimensions and other outcome variables. To fill this gap, we developed a model in this paper to test the relations between STROBE dimensions and firm performance with the consideration of the moderating role of organizational culture.

The relationship between strategic orientation and performance has been an important topic in management studies and has attracted the attention of scholars for decades (Acquaah, 2007; Chan, Huff, Barclay, & Copeland, 1997; Veliyath & Shortell, 1993; Venkatraman, 1989). However, a lack of consensus exists regarding the conceptualization and measurement of strategic orientation. As a result, conflicting theoretical perspectives and contrasting methodologies remain evident (Morgan & Strong, 2003). Other than STROBE dimensions recommended by Venkatraman (1989), several perspectives also consider strategic orientation of firms. In the following session, we discuss each perspective and compare them with the
STROBE approach.

Miles and Snow’s (1978) holistic approach proposes a four-archetype typology that includes both product-market and structure-process components. This perspective argues that the complexity of the strategy process can be simplified by searching for patterns of behaviors within firms. Porter’s (1980, 1991) dynamic view of strategic orientation emphasizes the activities (cost, differentiation, and scope) of firms in the product-market context. This typology focuses mainly on the product-market sector and generally overlooks contextual factors. An alternative view focuses on markets and perceives strategic orientation as a multidimensional construct that includes customers, competitors, technology, and products (Voss & Voss, 2000). However, the emphasis on the market narrows the generalizability of this typology as it ignores the internal behaviors of the firms.

In contrast to the afore-mentioned studies that focus on the external market, others incorporate normative theory and adopt the process, content, or contextual perspective (Veliyath & Shortell, 1993). These studies focus on the processes that result in strategic decisions (Mintzberg, 1990), the content that examines the properties of the strategy and the strategic decision (Veliyath & Shortell, 1993), or the conditions under which strategies emanate (Hartman, Lundberg, White, & Barnett, 1995). Such perspectives incorporate both the internal and external factors that influence firms’ strategic orientation and its link to business performance.

Venkatraman’s (1989) approach, which evaluates strategies by dimensions that are common to all firms, varies from the previously mentioned perspectives (Morgan & Strong, 2003). According to Venkatraman (1989), the strategic orientation of business enterprises (STROBE) dimensions examine realized strategy, with respect to competitors, that reflect the pattern of critical decisions made by firms. This approach overcomes empirical limitations of other typologies of strategic orientation in that “strategic orientation is viewed not across strict strategy classifications but, alternatively, along specific dimensions (Morgan & Strong, 2003, p.165).” This is also the reason why we revisit the STROBE dimensions in this study after twenty years of the validation.

In an attempt to empirically assess firms’ strategic orientation, we test the construct validity of the STROBE dimensions, and examine their relationships to both subjective and objective measures of business performance. The purpose is to develop a clearer view of the strategic orientation to performance relationship. In addition, in accordance with contingency theory, we examine organizational culture’s potential to moderate the relationship between the strategic orientation dimensions and performance. Specifically, the purpose of this research is to assess a main effect relationship between the STROBE dimensions and firm performance independently and the impact of organizational culture as a moderator of those relationships.

The present study contributes to the extant strategic orientation literature in several ways. First, we adopt a broader and more holistic perspective of strategic orientation by revisiting the STROBE dimensions. The examination of specific STROBE dimensions enables us to capture the critical decisions that firms make in their business operations. Second, we test the construct validity of the STROBE dimensions, contributing to a more thorough understanding of its utility
for future research. Third, including organizational culture as a potential moderator of the strategic orientation to performance relationship provides for a better understanding of contextual influences on this relationship. Finally, incorporating both objective and subjective performance measures increases confidence in the results. The following model is proposed.

**FIGURE 1**
Theoretical Framework

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**STRATEGIC ORIENTATION AND STROBE DIMENSIONS**
Strategic orientation has been studied for decades (e.g., Chan et al., 1997; Slater, Olson,
Despite a focus on decisions of the firm and their impact on business performance, there is a lack of consensus on this link. In addition, disagreements on the conceptualization of strategic orientation still exist among management scholars (Morgan & Strong 2003).

According to Morgan and Strong (2003), strategy, in terms of multiple traits or dimensions is common to all firms. Thus, strategy can be assessed in terms of the firm’s relative emphasis, instead of across strategy classifications. The STROBE dimensions, originally developed by Venkatraman (1989), include aggressiveness, analysis, defensiveness, futurity, proactiveness, and riskiness. These dimensions incorporate views of executives and managers on their realized strategies within the target firms. This approach provides detailed information on a firm’s strategic orientation (Morgan & Strong 2003; Talke, 2007; Venkatraman, 1989). In this paper, we adopt these six dimensions and discuss their relationship to business performance.

The following sections briefly introduce each of these dimensions and propose a set of hypotheses.

**Aggressiveness.** Aggressiveness is a trait that primarily addresses a firm’s propensity to exploit and develop resources ahead of competitors in the marketplace (Venkatraman, 1989). Firms can be faster in either product innovation or market development, both of which are related to the pursuit of the more competitive positions in the market (Lumpkin & Dess, 2001). In order to achieve product innovation, firms need to invest in the innovation process more aggressively than others, thus, their business performance may decline in the short term. In order to achieve market development, firms need to exploit their existing markets while explore new ones. As a result, performance may suffer as the investment to keep ahead of competitors. Thus,

**Hypothesis 1:** Aggressiveness is negatively related to business performance.

**Analysis.** Analysis reflects a firm’s capacity for information generation and knowledge building that enables organizational learning (Cohen & Sproull, 1996; Talke, 2007). It refers to the firm’s overall problem solving approach (Miller & Friesen, 1984). The analysis dimension is a trait that represents the extent to which internal consistency is achieved in the firm’s business operations and its use of management systems (Grant & King, 1982). By systematically pursuing analytical activities such as collecting and interpreting information and deriving managerial implications, firms facilitate their objectives with competitive strategies (Talke, 2007). Such analytical activities are critical for, and are likely to positively impact, business performance, regardless of the external environment (Goll & Rasheed, 1997; Morgan & Strong, 2003). Thus,

**Hypothesis 2:** Analysis is positively related to business performance.

**Defensiveness.** Defensiveness reflects a firm’s behaviors toward defending their core competencies through the adoption of relevant strategies (Venkatraman, 1989). A firm that adopts defensive activities concentrates on its specialized area and is likely to achieve high levels of business performance from such specialization (Morgan & Strong, 2003). Specialization leads to a focus on a narrower market, which may lead to cost or differentiation advantages and strategic expertise. In addition, firms that demonstrate defensiveness are able to accumulate selected capabilities and skills, and develop composite strategies to outperform less domain-
focused firms (Hart & Banbury, 1994). Thus,

**Hypothesis 3:** Defensiveness is positively related to business performance.

**Futurity.** Futurity reflects an emphasis on a firm’s long-term considerations. A firm that possesses this trait is incorporating its vision of the future as part of the strategic concern. For example, such firms emphasize forecasting future sales, consumer preferences, and market trends. They are more likely to benefit from their visions of the future by reducing risks in the marketplace (Courtney, Kirkland, & Viguerie, 1997). Consequently, a firm’s futurity is associated with its business performance in that the long-term vision the firm helps to enhance its strategic competitiveness in the marketplace (Ganesan, 1994; Mintzberg, 1994). Thus,

**Hypothesis 4:** Futurity is positively related to business performance.

**Proactiveness.** Proactiveness reflects behaviors that are initiating in nature. A proactively oriented firm seeks new opportunities. Innovation is a central, but not sole, concern for proactive orientations. Other concerns include opportunity seeking and forward-looking (Venkatraman, 1989). Proactive firms can be expected to achieve higher performance than those that are less proactive because the former seeks to stay one step ahead and is thus more likely to benefit from first mover advantages (Wright, Kroll, Pray, & Lado, 1995). Thus,

**Hypothesis 5:** Proactiveness is positively related to business performance.

**Riskiness.** Riskiness captures “the extent of riskiness reflected in various resource allocation decisions as well as choice of products and markets (Venkatraman, 1989, p. 949).” The riskiness trait requires risk oriented decision making and opportunistic venture seeking (Clark & Montgomery, 1996). Firm profitability may suffer from the adoption of such strategies due to the additional risks incurred and less predictable returns. Thus,

**Hypothesis 6:** Riskiness is negatively related to business performance.

**THE MODERATING ROLE OF ORGANIZATIONAL CULTURE**

Organizational culture is the pattern of shared values and beliefs that help its members understand organizational functioning and provide them norms for behavior in the organizations (Dwyer, Richard, & Chadwick, 2001). Organizational values are expressed, in part, in organizational practices. Therefore, they can be derived from existing practices within an organization, department, or work unit, and understood by members within the firm (Van den Berg & Wilderom, 2004). Given the emphasis on shared values and beliefs, organizational culture can be expected to vary across firms in terms of the strength of the culture. For example, in a strong organizational culture, employees would have a similar set of values and beliefs.

In accordance with contingency theory, there are circumstances under which the relationship between strategic orientation and performance can be expected to vary. Thus, a firm’s strategic orientation can be expected to influence firm performance not independently but in conjunction with contingency factors (Durand & Coeureroy, 2001). In the present study, focus is on the moderating impact of an emphasis on a clan culture, and its focus on how socialization and internalized values intervene in the STROBE-performance relationship. In general, organizational culture represents the context in which firms operate. It serves as an
organizational control mechanism and it provides members of the firm with internalized expectations about how they should behave (Deshpande & Webster, 1989). Thus, it can be expected to moderate the relationship between a firm’s strategic orientation and its business performance. The clan culture, which is internally oriented, emphasizes informal governance. Such an internal oriented culture is shared across members within the firms and it influences members’ ways of generating, understanding, and implementing the strategies (Chatman & Barsade, 1995).

According to Wilkins and Ouchi (1983), clan represents the type of organizational culture based on socialization and internalized values. A firm that emphasizes a clan culture encourages employees to assist each other in the decision-making processes within the organization (Xiao & Tsui, 2007). Hence, a clan culture is generally a friendly place to work (Dwyer et al., 2001). In addition, cooperation and trust are more likely to develop within such firms (Alvesson & Lindkvist, 1993). In such an environment, strategies that serve certain orientations can be expected to facilitate better performance. As a result, the positive relationship between strategic orientation and business performance should be strengthened given the existence of a clan culture and the resulting environment, while the negative relations between the strategic orientation dimensions and business performance should be weakened.

Firms that emphasize aggressiveness tend to act faster than their competitors in exploiting and developing resources (Morgan & Strong, 2003), thus, bringing uncertainties to firms that possess such traits. However, such uncertainties can be reduced when firms have a high clan due to increased cooperation that facilitates information flow, and generates understandings among organizational members (Alvesson & Lindkvist, 1993). Thus,

Hypothesis 7a: The negative relationship between aggressiveness and performance will be weakened in firms with high clan cultures relative to those with low clan cultures.

As opposed to firms that emphasize aggressiveness, those that emphasize analysis tend to achieve certain levels of consistency in their business operations (Morgan & Strong, 2003). The shared values and beliefs by the members of clan cultures may enhance the consistency of the strategies and facilitate the knowledge building among members. In such an environment, members of the firm are more likely to work under consistent strategies and towards the same goal. Thus, a clan culture seems ideally suited for firms that emphasis the analysis dimension of STROBE. Thus,

Hypothesis 7b: The positive relationship between analysis and performance will be strengthened in firms with high clan cultures relative to those with low clan cultures.

Additionally, firms that adopt defensive behaviors, and their accompanying concentration on specialized areas, are likely to use strategic specialization to achieve better performance (Venkatraman, 1989). A high clan culture within such firms may enhance the cooperation between members in defending the core competencies of the firms, especially for firms that rely on defensive strategies to achieve better performance. As a result, a high clan culture should
facilitate the implementation of a defensiveness strategic orientation. Thus,

Hypothesis 7c: The positive relationship between defensiveness and performance will be strengthened in firms with high clan cultures relative to those with low clan cultures.

Firms that emphasize futurity incorporate their vision of the future as part of its strategic concerns (Courtney et al., 1997). Such firms may benefit from high clan cultures because it facilitates understanding among employees in terms of organizational goals. The better the employees understand the vision of the firm, the more likely they can work together towards achieving such goals. Thus,

Hypothesis 7d: The positive relationship between futurity and performance will be strengthened in firms with high clan cultures relative to those with low clan cultures.

Firms that engage in proactive behaviors constantly seek new opportunities (Wright et al., 1995). Such opportunities may benefit firms in achieving higher performance. Adopting such an opportunity-seeking orientation requires cooperation among members. A clan culture enhances members’ cooperation, which can be expected to facilitate the implementation of opportunity-seeking behaviors such as proactiveness. Thus,

Hypothesis 7e: The positive relationship between proactiveness and performance will be strengthened in firms with high clan cultures relative to those with low clan cultures.

Finally, firms that possess riskiness traits are actively involved in risk taking and opportunistic seeking behaviors. Since such behaviors are intuitive in nature, as a result, firms are likely to suffer if their employees are not working towards the same goal (Clark & Montgomery, 1996). However, the presence of a high clan culture within a firm may provide employees with a better understanding of the reasons behind such behaviors and thus enhance cooperation towards achieving strategic goals. Thus,

Hypothesis 7f: The negative relationship between riskiness and performance will be weakened in firms with high clan cultures relative to those with low clan cultures.

METHODS
Data Collection

This study employed a single-industry sampling frame to control for the potential effects of environmental factors on firm performance. The banking industry was chosen because deregulation increased the heterogeneity of strategic orientations employed (Delery & Doty, 1996). Also, banks are required to report financial information allowing for access to business performance data. As a result, any bias of the representativeness of the sample resulting from the inability to obtain objective financial information was avoided (Delery & Doty, 1996).

A questionnaire was sent to the president of each bank drawn from a stratified random sample of 2100 banks. The bank’s president was targeted because they were thought to be the most knowledgeable about their bank's activities and business performance (Hambrick, 1981;
Snow & Hrebiniak, 1980; Zahra, 1991). Non-respondents were sent a second questionnaire three weeks following the first mailing. A total of 579 completed and usable questionnaires were received. The bank presidents completed items related to their firms’ strategic orientation, organizational culture, subjective performance, and other background information. To provide more confidence in the STROBE responses from bank presidents, we obtained data from a subsample of nearly 200 Vice Presidents of Human Resources finding that there was convergence in how both parties viewed the firm’s strategic orientation. Therefore, we were comfortable utilizing the bank president’s response on the full 579 banks to tap into the STROBE construct.

Non-response bias was then assessed by comparing bank president responses from the two waves of surveys (Armstrong & Overton, 1977). Multivariate and Univariate analyses did not indicate significant differences between the first and second wave of respondents. The average number of employees in the responding banks was 154 and the average bank age was 75 years old. The mean return on equity (ROE) was 13.57%, which closely approximated the 14.49% average ROE reported in the Federal Deposit Insurance Corporation’s Internet site for the entire population of banks in the US. The responding presidents’ average position tenure was 8.46 years and average industry tenure was 25.75 years.

**Measures**

**Independent measures.** Dimensions of strategic orientation was measured using the six-dimension STROBE scale developed by Venkatraman (1989). In total, 28 of the original 29 items were utilized and measured on a Likert-type scale ranging from “1=not at all” to “7=to an extreme extent”. One original proactiveness item reading “Competitors preempt us by expanding capacity ahead of them” was unintentionally omitted from the survey. Clan organizational culture was measured using the Competing Values Scale developed by Quinn and colleagues (Quinn & Rohrbaugh, 1983; Quinn & Spreitzer, 1991; Quinn, 1988). The four item scale is comprised of Likert-type items scored on a 7-point scale ranging from “1=strongly disagree” to “7=strongly agree”.

**Dependent measures.** Two measures of business performance were included in the analysis. Performance satisfaction, a modified version of the instrument developed by Gupta and Govindarajian (1984), is a subjective measure which asks respondents to indicate the extent to which he or she is currently satisfied with the firm’s performance on each of the criteria: sales level, sales growth rate, cash flow, return on shareholder equity, gross profit margin, net profit from operations, and profit to sales ratio. ROE was our objective measure of business performance. The subjective performance satisfaction obtained from the bank president was positively correlated with ROE at p < .01, providing confidence in our two business performance measures and their convergent validity.

**Control variables.** Three control variables were accounted for in the framework which have been shown to impact performance. First, we used the logarithm of total assets to measure organizational size as it has been shown to relate to business performance (Delery & Doty, 1996). Secondly, we controlled for absence or presence of a holding company with a dummy code.
Thirdly, we controlled for bank age as older banks differ in their performance relative to younger banks.

ANALYSIS AND RESULTS

Measurement Assessment Procedures

Following Anderson and Gerbing’s (1988) recommendation, we assessed the validity, unidimensionality, and reliability of the measures. Two confirmatory factor analysis (CFA) models were estimated. The first included seven multi-item constructs—analysis, defensiveness, futurity, proactiveness, riskiness, aggressiveness, and performance satisfaction—a total of thirty-five items. The initial results proved unsatisfactory due to less than adequate fit statistics, poor loadings, high residuals, and modification indices. As a result, eight items were eliminated. The resulting fit statistics were: $\chi^2=610.508$, $df=300$, RMSEA=0.042, GFI=0.93, IFI=0.94, and CFI=0.94 indicating a good fit (Byrne 2001). The second CFA model consisted of only the clan culture construct (four items), the moderator variable in the study. The model produced a good fit: $\chi^2=0.769$, $df=2$, RMSEA=0.000, GFI=0.99, IFI=0.99, and CFI=0.99.

Once overall fit was determined, individual scale reliability was estimated by computing average variance extracted and composite reliability. All item loadings ($\lambda$s) were significant at $p<.05$ level (t-values ranged from 7.017 to 14.440). The average variances extracted (AVE) were 0.79, 0.941, 0.939, 0.903, 0.946, 0.982, 0.664, and 0.92 for analysis, defensiveness, futurity, proactiveness, riskiness, aggressiveness, performance satisfaction, and clan culture, respectively. The corresponding composite reliabilities were 0.947, 0.979, 0.984, 0.963, 0.980, 0.987, 0.915, and 0.964, respectively. All AVEs and composite reliabilities figures exceeded recommended levels (Bagozzi & Yi, 1988).

Because the data for this study were obtained from a single survey, common method variance was possible. Following Podsakoff and Organ (1986), we employed the Harman’s one-factor test in which all variables are hypothesized to load on a single factor representing the common method. No such single factor emerged. Before proceeding to structural model assessment, we examined convergent and discriminant validity. An acceptable convergent validity was achieved with significant t-values (ranging from 5.819 to 14.913) for all indicators (Gerbing & Anderson, 1988). The test for discriminant validity was supportive, no confidence intervals (+/- two standard errors) for the estimated correlations for the constructs included 1.0 (Anderson & Gerbing, 1988). To further test for discriminant validity, the AVE for each factor was compared with, and exceeded, the squared correlations between that factor and all other factors (Fornell & Larcker, 1981).

Hypotheses Tests

STROBE dimensions. In testing the hypotheses, we first estimated the model with all six STROBE dimensions—analysis, defensiveness, futurity, proactiveness, riskiness, and aggressiveness—and two performances—performance satisfaction and ROE. The resulting fit measures were: $\chi^2=517.244$, $df=320$, RMSEA=0.047, GFI=0.884, IFI=0.924, and CFI=0.923. The regression weights are evaluated in light of the corresponding t-values (or critical ratios) of...
each item. Because the moderating effect of clan culture on the aggressiveness to performance relationship was not clear with the STROBE’s six dimension model, we re-estimated a five dimension model without aggressiveness. The values of the fit indices showed a good fit: $\chi^2=589.602$, $df=252$, RMSEA=0.048, GFI=0.93, IFI=0.93 and CFI=0.93. Results pertaining to the futuristic dimension prompted us to re-estimate a four dimension model to determine the best fitting moderated model (see Figure 2). The values of the fit indices for the entire sample showed a good fit: $\chi^2=604.481$, $df=252$, RMSEA=0.049, GFI=0.92, IFI=0.92, and CFI=0.92. Summary statistics and fit indices are given in Table 1.

**FIGURE 2**
*Structural Models and Results*

- Analysis
- Defensiveness
- Proactiveness
- Riskiness
- Clan Culture

Full Sample

Performance Satisfaction

Return on Equity
FIGURE 2 Continued
Structural Models and Results

Analysis

Defensiveness

Proactiveness

Performance Satisfaction

Return on Equity

Riskiness

Only high Clan Culture Group
Sample-All Free Paths

Positively Related
Negatively Related

Only Low Clan Culture Group
Sample-All Free Paths
Model - Same for High and Low Clan Culture Groups

All Fixed paths

<table>
<thead>
<tr>
<th></th>
<th>Positively Related</th>
<th>Negatively Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riskiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Equity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1**

Summary Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggressiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Analysis</td>
<td>.45**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Proactiveness</td>
<td>.41**</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Riskiness</td>
<td>n.s.</td>
<td>-.11**</td>
<td>.12**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Clan culture</td>
<td>.24**</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Perf. satisfaction</td>
<td>-.20**</td>
<td>.21**</td>
<td>.23**</td>
<td>n.s.</td>
<td>.11**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Return on equity</td>
<td>n.s.</td>
<td>.16**</td>
<td>.22**</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.43**</td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Mean</td>
<td>4.74</td>
<td>3.23</td>
<td>3.79</td>
<td>3.79</td>
<td>5.47</td>
<td>.36</td>
<td>13.77</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>.85</td>
<td>1.16</td>
<td>1.09</td>
<td>.946</td>
<td>.89</td>
<td>.67</td>
<td>5.46</td>
</tr>
<tr>
<td>AVE</td>
<td>.79</td>
<td>.94</td>
<td>.90</td>
<td>.95</td>
<td>.92</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Composite reliability</td>
<td>.96</td>
<td>.98</td>
<td>.96</td>
<td>.98</td>
<td>.96</td>
<td>.92</td>
<td></td>
</tr>
</tbody>
</table>
** Correlation is significant at the 0.01 level

We compared the three moderated models—six STROBE, five STROBE and four STROBE dimensions models using the criteria of Akaike’s information criterion (AIC) and Browne-Cudeck criterion (BCC). In addition we looked at the fit statistics of the three models. The four STROBE dimensions model had the lowest AIC and BCC values in both the all-free paths model and all-fixed paths model. In addition, factor analysis reveals that all the critical ratios for the items are highly significant—above 1.96 at a .05 level. Thus the model of choice was the four STROBE dimension model (as shown in table 2 and 3).

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Model Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>Six STROBE Dimensions</td>
</tr>
<tr>
<td>All paths free model</td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>1389.12</td>
</tr>
<tr>
<td>BCC</td>
<td>1427.45</td>
</tr>
<tr>
<td>Chi-square</td>
<td>1045.13</td>
</tr>
<tr>
<td>Df</td>
<td>640</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.03</td>
</tr>
<tr>
<td>GFI</td>
<td>0.89</td>
</tr>
<tr>
<td>IFI</td>
<td>0.93</td>
</tr>
<tr>
<td>CFI</td>
<td>0.93</td>
</tr>
<tr>
<td>All paths fixed model</td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>1389.88</td>
</tr>
<tr>
<td>BCC</td>
<td>1425.53</td>
</tr>
<tr>
<td>Chi-square</td>
<td>1069.88</td>
</tr>
<tr>
<td>Df</td>
<td>65</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.03</td>
</tr>
<tr>
<td>GFI</td>
<td>0.89</td>
</tr>
<tr>
<td>IFI</td>
<td>0.93</td>
</tr>
<tr>
<td>CFI</td>
<td>0.93</td>
</tr>
</tbody>
</table>
## TABLE 3

Standardized Parameter Estimates (Factor Loadings) of Each Construct

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Standardized Regression Weights</th>
<th>t-values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Four STROBE Dimensions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I. Analysis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Our bank emphasizes effective coordination among different functional areas.</td>
<td>.42</td>
<td>fixed*</td>
</tr>
<tr>
<td>2. Our bank emphasizes the use of information systems to provide support for decision making.</td>
<td>.77</td>
<td>9.20</td>
</tr>
<tr>
<td>3. When confronted with a major decision, we usually try to develop a thorough analysis.</td>
<td>.69</td>
<td>8.92</td>
</tr>
<tr>
<td>4. Our bank puts emphasis on the use of planning techniques.</td>
<td>.62</td>
<td>8.61</td>
</tr>
<tr>
<td>5. Our bank emphasizes the use of the output of management information and control systems.</td>
<td>.56</td>
<td>9.33</td>
</tr>
<tr>
<td><strong>II. Defensiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Our bank puts emphasis on the use of cost control systems for monitoring performance.</td>
<td>.67</td>
<td>fixed*</td>
</tr>
<tr>
<td>2. Our bank puts emphasis on the use of production management techniques.</td>
<td>.78</td>
<td>13.26</td>
</tr>
<tr>
<td>3. Our bank places emphasis on quality through the use of quality circles.</td>
<td>.53</td>
<td>10.50</td>
</tr>
<tr>
<td><strong>III. Proactiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Our bank is constantly seeking new opportunities related to the present operations.</td>
<td>.70</td>
<td>fixed*</td>
</tr>
<tr>
<td>2. Our bank is constantly on the lookout for other banks that can be acquired.</td>
<td>.45</td>
<td>9.03</td>
</tr>
<tr>
<td>3. Operations in later stages of the life cycle are strategically eliminated.</td>
<td>.35</td>
<td>7.19</td>
</tr>
<tr>
<td><strong>IV. Riskiness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. We seem to adopt a rather conservative view when making major decisions.</td>
<td>.75</td>
<td>fixed*</td>
</tr>
<tr>
<td>2. New projects are approved on a “stage-by-stage” basis rather than with “blanket” approval.</td>
<td>.34</td>
<td>5.82</td>
</tr>
</tbody>
</table>
3. Operations have generally followed the “tried and true” paths. 

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Standardized Regression Weights</th>
<th>t-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sales level.</td>
<td>.41 fixed*</td>
<td></td>
</tr>
<tr>
<td>2. Sales growth rate.</td>
<td>.37</td>
<td>14.34</td>
</tr>
<tr>
<td>3. Cash flow.</td>
<td>.51</td>
<td>8.04</td>
</tr>
<tr>
<td>4. Return on shareholder equity.</td>
<td>.78</td>
<td>9.52</td>
</tr>
<tr>
<td>5. Gross profit margin.</td>
<td>.80</td>
<td>9.56</td>
</tr>
<tr>
<td>6. Net profit from operations</td>
<td>.89</td>
<td>9.77</td>
</tr>
<tr>
<td>Clan Culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. My bank is a very personal place. It is like an extended family. People see, to share a lot of themselves.</td>
<td>.55</td>
<td>8.34</td>
</tr>
<tr>
<td>2. The head of my bank is generally considered to be a mentor, sage, or a father or mother figure.</td>
<td>.48 fixed*</td>
<td></td>
</tr>
<tr>
<td>3. The glue that holds my bank together is loyalty and tradition, Commitment to this bank runs high.</td>
<td>.68</td>
<td>9.05</td>
</tr>
<tr>
<td>4. My bank emphasizes human resources. High cohesion and morale in the bank are important.</td>
<td>.74</td>
<td>9.11</td>
</tr>
</tbody>
</table>

* Fixed for identification

**Main effects of four STROBE dimensions model.** We employ conservative two-tailed test in our analyses and will thus present these. The results for the path coefficients were mixed (see Table 3 and Figure 2). The analysis dimension was negatively related to both performance satisfaction ($t=.22, p=.034$) and ROE ($t=-.82, p=.003$). Defensiveness was unrelated to performance satisfaction but was positively related to ROE ($t=.36, p=.050$). Proactiveness was positively related to both performance satisfaction ($t=.22, p=.018$) and ROE ($t=.28, p=.005$). Riskiness was negatively related to performance satisfaction ($t=-.08, p=.048$) and marginally related to ROE ($t=-.10, p=.052$). Although not hypothesized, we note that clan culture had a
positive, albeit marginal, relationship to performance satisfaction (t=.06, p=.076) but not ROE. In sum, consistent with previous research (Venkatraman, 1989), hypotheses 3, 5, and 6 were supported.

**TABLE 4**
Fit Measures

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA</th>
<th>GFI</th>
<th>IFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model with IVs &amp; DVs for full sample</td>
<td>604.48</td>
<td>25</td>
<td>.05</td>
<td>.92</td>
<td>.92</td>
<td>.92</td>
</tr>
<tr>
<td>Model with IVs &amp; DVs for High/Low samples and all 8 free paths</td>
<td>606.54</td>
<td>34</td>
<td>.04</td>
<td>.91</td>
<td>.93</td>
<td>.93</td>
</tr>
<tr>
<td>Model with IVs &amp; DVs for High/Low samples and all 8 fixed paths</td>
<td>627.82</td>
<td>35</td>
<td>.04</td>
<td>.91</td>
<td>.93</td>
<td>.93</td>
</tr>
</tbody>
</table>

**TABLE 5**
Path Coefficients of Full Sample Model, Free-Paths Model, and Fixed-Path Model

<table>
<thead>
<tr>
<th>Structural Paths</th>
<th>Model with Full Sample</th>
<th>All Free-Paths Model</th>
<th>All Fixed-Paths Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High C.C.</td>
<td>Low C.C.</td>
<td>Equal High/Low C.C.</td>
</tr>
<tr>
<td>Analysis→ps</td>
<td>-.22 (.03)</td>
<td>n.s.</td>
<td>-.54 (.06)</td>
</tr>
<tr>
<td>Analysis→roe</td>
<td>-.82 (.00)</td>
<td>-.63 (.02)</td>
<td>-.48 (.04)</td>
</tr>
<tr>
<td>Defensiveness→ps</td>
<td>n.s.</td>
<td>.18 (.04)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Defensiveness→roe</td>
<td>.36 (.05)</td>
<td>.28 (.02)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Proactiveness→ps</td>
<td>.22 (.02)</td>
<td>.09 (.09)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Proactiveness→roe</td>
<td>.28 (.01)</td>
<td>.39 (.04)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Riskiness→ps</td>
<td>-.08 (.05)</td>
<td>n.s.</td>
<td>-.27 (.04)</td>
</tr>
<tr>
<td>Riskiness→roe</td>
<td>-.10 (.05)</td>
<td>n.s.</td>
<td>-.30 (.06)</td>
</tr>
<tr>
<td>Clan culture→ps</td>
<td>.06 (.08)</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>Clan culture→roe</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C.C.: Clan culture
ps: Performance satisfaction
roe: Return of equity
n.s.: Not significant at p > .10
### Table 6: Moderating Effects of Clan Culture

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>Df</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta$ df</th>
<th>Stat.</th>
<th>$\beta$ fixed$^1$</th>
<th>$\beta$ high$^2$</th>
<th>$\beta$ low$^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>All free paths</td>
<td>606.54</td>
<td>344</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All fixed paths</td>
<td>627.82</td>
<td>352</td>
<td>21.28</td>
<td>8</td>
<td>p&lt;.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analy.→ps fixed</td>
<td>613.27</td>
<td>345</td>
<td>6.73</td>
<td>1</td>
<td>p&lt;.01</td>
<td>-.65 (.02)</td>
<td>n.s.</td>
<td>-.54 (.057)</td>
</tr>
<tr>
<td>Analy.→roe fixed</td>
<td>606.68</td>
<td>345</td>
<td>0.14</td>
<td>1</td>
<td>n.s.</td>
<td></td>
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<tr>
<td>Defen.→ps fixed</td>
<td>613.39</td>
<td>345</td>
<td>6.85</td>
<td>1</td>
<td>p&lt;.01</td>
<td>n.s.</td>
<td>.18 (.04)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Defen.→roe fixed</td>
<td>610.32</td>
<td>345</td>
<td>3.78</td>
<td>1</td>
<td>p&lt;.10</td>
<td>n.s.</td>
<td>.28 (.02)</td>
<td>n.s.</td>
</tr>
<tr>
<td>Proact.→ps fixed</td>
<td>610.86</td>
<td>345</td>
<td>4.32</td>
<td>1</td>
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<td>n.s.</td>
<td>.09 (.09)</td>
<td>n.s.</td>
</tr>
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<td>Proact.→roe fixed</td>
<td>611.72</td>
<td>345</td>
<td>5.18</td>
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<td>.15 (.01)</td>
<td>.39 (.04)</td>
<td>n.s.</td>
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<td>Riski.→ps fixed</td>
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<td>345</td>
<td>4.34</td>
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<td>p&lt;.05</td>
<td>-.07 (.07)</td>
<td>n.s.</td>
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</tr>
<tr>
<td>Riski.→roe fixed</td>
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<td>345</td>
<td>3.70</td>
<td>1</td>
<td>p&lt;.10</td>
<td>-.43 (.04)</td>
<td>n.s.</td>
<td>-.30 (.06)</td>
</tr>
</tbody>
</table>

1. $\beta$ fixed: path fixed for high and low clan culture groups
2. $\beta$ high: path coefficient in high clan culture group
3. $\beta$ low: path coefficient in low clan culture group
4. All free paths: Base line model where all 8 structural paths are free in both high and low clan culture groups
5. All fixed paths: all 8 structural paths are fixed in both high and low clan culture groups

**Moderating role of clan culture in four STROBE dimensions model.** The $\Delta \chi^2$ between the all free-paths model and all fixed-paths model was significant ($\Delta \chi^2=21.28$, p<0.01), indicating that clan culture had moderating effects on some of the structural paths (see Table 4, 5, and Figure 2). Also, the path coefficients corresponding to the free-paths model and fixed-paths model indicated the presence of moderating effects of the clan culture. The chi-square difference for the analysis to performance satisfaction linkage was significant (6.726, p<.01). The linkage was marginally significant and negative in low clan culture ($t=-.54$, p=.057) and was not significant in high clan culture. The chi-square difference for analysis to ROE was not significant. The $\Delta \chi^2$ for defensiveness to performance satisfaction relationship was significant (6.852, p<.01). The relationship was positive and strongly significant in high clan culture but was not significant in low clan culture. The chi-square difference for defensiveness to ROE linkage was marginally significant (3.782, p<.10). The relationship was marginally significant and positive for high clan culture.
culture and not so with low clan culture. The chi-square difference for the proactiveness to performance satisfaction relationship was significant ($4.32$, $p<.05$). The relationship was marginally significant and positive for high clan culture ($t=.09$, $p=.086$) but was not significant for the low clan culture. The chi-square difference for the proactiveness to ROE relationship was highly significant ($5.18$, $p<.05$). The relationship was positively significant for high clan culture ($t=.39$, $p=.042$) but was not significant for low clan culture. The chi-square difference for the riskiness to performance satisfaction relationship was highly significant ($4.341$, $p<.05$). The relationship was negatively significant for low clan culture ($t=-.27$, $p=.037$) but was not significant for high clan culture. The chi-square difference for the riskiness to ROE relationship was marginally significant ($3.706$, $p<.10$). The relationship was negatively significant for low clan culture ($t=-.30$, $p=.056$) but was not significant for high clan culture. In sum, consistent with our theoretical development, hypotheses 7c, 7e, and 7f were supported. Although we still present two-tailed analysis we note that when we used a one-tailed analyses our results were more robust at all significant levels for hypotheses 3, 5, 6, 7c, 7e, and 7f. In sum, six of our twelve predictions were supported.

**DISCUSSION**

H$_1$ through H$_6$ all posit that STROBE dimensions are associated with business performance. Findings of this study revealed some empirical support for three out of the six dimensions. In testing the main effects model, the results suggest that both defensiveness and proactiveness have, as predicted, a positive relationship to business performance. Additionally, riskiness was, also as predicted, negatively related to business performance. These results are based on a four dimension model. The six dimension model revealed that aggressiveness was negatively related to business performance while futurity was unrelated to business performance consistent with Venkatraman (1989). However, this model had acceptable, but not superior fit, to the four dimension model. In fact, recent research has found support for a 4 dimension model (Talke, 2007).

Most STROBE dimensions tested had a significant relationship to business performance across the sample of banks. The lack of support for three STROBE dimensions may be attributable, at least in part, to the cross-sectional nature of the study. The results may not reveal the potential longitudinal impact on business performance. It may take some time before the performance effects of some strategic actions are realized. More specifically, the lack of findings related to futurity could be that it takes several years for such actions to impact performance. This suggests that lagged models might be more appropriate, as well as long term measures such as Tobin’s q (Richard et al., 2007). Also, there may be smaller within industry effects than those across industries because firms within the same industry can compete along different STROBE dimensions and still achieve similar performance outcomes (Jennings & Seaman, 1994; Zahra, Jennings, & Kuratko, 1999). However, because the study used a single industry sample, the results may not be generalizable to some industries. In addition, the use of cross-sectional data precludes any inference of causality between variables.
It is plausible that a firm's strategic orientation may influence performance or that performance may influence strategic behaviors. That is, bank presidents, or other managers, may feel that certain actions are warranted if they perceive they can improve firm performance. Other managers in poorly performing firms may feel that similar actions should be avoided (Covin & Slevin, 1988). Thus, while this study did provide some support for STROBE effects, the findings should be interpreted conservatively. Future research should examine the potential long-term implications of strategic orientation. Zahra and Covin (1995) found a positive relationship between firm-level behaviors and performance over a 7-year span. Wiklund (1999) assessed the sustainability of the strategic orientation to performance relationship. Such results suggest that the outcomes associated with strategic behaviors may continue over an extended period of time. More longitudinal studies are needed to substantiate these findings and to establish the causal sequences among strategic orientation and firm performance.

The analysis of the four dimension model supports the position that a clan culture can be expected to moderate the STROBE dimensions to performance relationships. Specifically, the results support, as posited, that high, versus low clan cultures, may provide a cohesive environment that allows companies that pursue a defensive and/or proactive strategic orientation more effective implementation of strategy and thus, superior performance. Organizations that place little emphasis on a clan culture realized significantly lower performance when they engaged in relatively high levels of risky behaviors. This suggests that an uncertain, risky approach is more compatible with the inclusive, clan culture because such firms did not appear to suffer from lower performance as was seen in the main effect findings of this study.

Although opposite our initial predictions, similar results were found for assessment of the analysis dimension. That is, the negative relationship to performance was not found in firms with a strong clan culture. A clan culture appears to provide a family-oriented, participative, team-oriented, cohesive context that allows a company to pursue an analysis strategy and more effectively coordinate among different functional areas. In sum, we did not find any conditions in which STROBE negatively influenced performance in a clan culture while there were often times positive effects depending on the dimension. These findings, in support of contingency theory, imply that future research should adopt such an approach when testing the strategic orientation to performance relationship. These results contribute to extant literature on the potential complexity of such relationships by revealing that testing simple main effects, although enlightening, may not comprehensively and sufficiently capture the nature of strategic orientation to performance relationships.

After revisiting the STROBE dimensions which were developed twenty years ago (Venkatraman 1989), we suggest that a firm’s strategic orientation may indeed influence their financial success and that contextual factors could be critical. Existing studies have paid attention to the relations between STROB dimensions and the outcomes variables. The contextual factors are relatively overlooked. This gives us opportunities to further develop the STROBE-performance model. In addition, while we focus exclusively on the clan culture, other facets of organizational culture should be explored in the future. It could be that a culture that values
markets and competition (e.g., market, adhocracy) offers an appropriate context for some of the STROBE dimensions but not others (Deshpande & Webster, 1989). In addition to organizational culture, characteristics of chief executive officers and top management teams, as well as team dynamics, may also be important contingency factors.

Examining the moderating effects of individual and team characteristics could complement studies that investigate the moderating effects of firm level factors on the strategic orientation to performance relationship. Future research should incorporate diverse measures of performance and non-financial goals. Measures of performance may be influenced differently by strategic activity, especially at different stages in the life of a firm. Zahra (1993) suggests that the significance of performance measures varies during the life span of a firm. In addition, firm type, and its mission and objectives, may impact the significance of specific “performance” criteria. Finally, the external environment should be considered in that STROBE may have more powerful predictive ability in particular industries, countries, or task environments. We believe the STROBE construct holds promise for future research in the strategy domain and we hope the present findings offer some impetus for more rigorous exploration of its relationships to firm performance.

REFERENCES


JOE EMBEDDEDNESS AND SUBJECIVE NORMS IN AN EAST ASIAN (KOREAN) CONTEXT

Joon Hyung Park, University of Houston, jpark19@uh.edu
Hyoung Koo Moon, Korea University, hkmoon@korea.ac.kr

ABSTRACT

This study is about the effects of job embeddedness and subjective norms on the intent to quit. The main argument on job embeddedness is that the higher the job embeddedness, the less people think about leaving a job. Many researchers have been interested in the topic, “Job embeddedness” and have conducted empirical research since 2001. This study replicated the work of Mitchell et al. (2001b) and found that job embeddedness is a meaningful construct in Korea, especially on-the-job embeddedness dimensions. However, it gives some concerns on off-the-job embeddedness construct and we suggest that subjective norms are more meaningful in terms of non-job factors in an East Asian (Korean) context.

Currently, organizations worldwide face an economic recession and pressure to strengthen their competitiveness. In addition, globalization is prevalent in the business, causing more intense competitions. Retaining talented and dedicated employees can give organizations advantages over their competitors (Pfeffer, 1994). Moreover, research show that to lose competitive employees incurs cost (Hatch & Dyer, 2004; Shaw, Gupta, & Delery, 2005). Researchers have asked “why people leave” an organization (Lee & Mitchell, 1994; Mitchell et al., 2001b) and have tried to understand which factors are the most influential in retaining valuable employees. Many studies have focused on work attitudes such as job satisfaction and organizational commitment and the perceived ease of movement. Previous research with job attitudes and perceived ease of movement have been supported, but Griffeth, Hom and Gaertner (2000) reported that the variables explain only little variances in turnover. This finding makes an important point that researchers need to search for unexplained factors besides focusing on job attitudes or perceived alternative (Maertz & Campion, 1998).

Mitchell et al (2001b) introduced a new concept called “job embeddedness.” They imposed different question, “why people stay” rather than “why people leave”, and answered the question with job embeddedness. Simply put, job embeddedness is like a web or net in which people get stuck. The higher the job embeddedness, the less people think about leaving a job. The concept of job embeddendess contains both on-the-job factors and off-the-job factors (i.e. community). Research from the past eight years empirically supports job embeddedness and provides new implications for HR practices (Felos, Mitchell, Hekman, Lee, Holtom, & Harman, 2009; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mitchell et al., 2001b; Yao, Lee, Mitchell, Burton, & Sablynski, 2004).
Johns (2006) emphasized the importance of context on organizational behavior and social-situational factors may reverse relationship among variables. In published studies, the validity of job embeddedness was tested within a limited North-American cultural context, however. It is worthwhile to replicate the study with samples from different contexts and in this study, we examined job embeddedness in a Korean context.

Moreover, the assumptions of off-the-job embeddedness are based on North-American cultural context. Off-the-job embeddedness (i.e. how people are attached with community) is based on the assumptions that community plays an important role in individual’s life and people move when they take new jobs at different organizations. These may apply well in U.S. or Canada but may not apply to a certain context (or country) that changing job does not mean that they need to move to different community and the meaning of community is different. We look at the effects of off-the-job embeddedness in Korea and examined whether off-the-job embeddedness is meaningful construct or not.

Further, we suggest that subjective norms fit better than off-the-job embeddedness in an East Asian culture. Subjective norms refer to the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991). In an East Asian culture, collectivistic culture and Confucianism have been a core part of values for guiding people’s behavior (Hofstede, 1996) and these principles affects behavior that they tend to be more aware of the relationship with others and concerned about other people’s judgment (Kim & Nam, 1998). People are connected tightly with social connections and it may be difficult to decide without concerning about family or friends’ opinions.

Thus, this paper replicates the previous job embeddedness studies to examine the validity of the construct in an East Asian (e.g. Korean) context and look at whether subjective norms explain intent to quit as one of off-the-job factors.

**JOB EMBEDDEDNESS**

Theoretical backgrounds for job embeddedness were from the field theory (Lewin, 1951) and the concept of embedded figures (Witkin, Dyk, Paterson, Goodenough, & Karp, 1962). Field theory claims that “people have a perceptual life space in which the aspects of their lives are represented and connected” (Mitchell et al, 2001, p1104). Embedded figures are attached in their background and it is difficult to separate them from the backgrounds. “Stuckness” is the best description of job embeddedness which means if one is highly embedded; it is difficult to leave one’s job (Mitchell & Lee, 2001).

Job embeddedness represents the term summarizing a broad constellation of factors influencing retention. Mitchell et al. (2001b) compared it to a person in a web. Like being in a web, people are connected with various nodes where the number and strength of connections may vary. Leaving one’s job may disturb the web to which he or she is connected, and if the person is highly embedded, he or she is more likely to stay in the organization (Mitchell, Holtom, & Thomas, 2001c). Mitchell et al. (2001b, p1104) explained the critical aspects of job embeddedness as “(1) the extent to which people have links to other people or activities, (2) the
extent to which their jobs and communities are similar to or fit with the other aspects in their life spaces, and, (3) the ease with which links can be broken—what they would give up if they left, especially if they had to physically move to other cities or homes”. They label those with “links”, “fit”, and “sacrifice” and three dimensions exist in the on-the-job (organization) and off-the-job (community) levels. We briefly explain links, fit, and sacrifice below and figure1 present definitions of each dimension.

Links refer to “formal or informal connections between a person and either institutions or other people” (Mitchell et al., 2001b: 1104). The higher the number of connections a person has, the more embedded a person is. Examples of organizational links are years of work experience, interaction with coworkers, and a number of teams and committees in which one is involved in. Examples of community links are marriage status, ownership of property in the community, and the number of family members or friends.

Fit is described as “an employee's perceived compatibility or comfort with an organization and with his or her environment”. It is about how well a person fits in the organization and community (Mitchell et al., 2001b: 1104). That means that the values, goals, or culture of an organization fit with values, goals, or culture of a person as well as cultures in the community fit with people, activities or weather.

Sacrifice refers to “the perceived cost of material or psychological benefits that may be forfeited by leaving a job” (Mitchell et al., 2001b: 1105). Sacrifice includes both visible (perks, benefits) and invisible aspects such as opportunities for job stability and advancement. Simply put, it is more difficult to leave a job for an employee as there is more to give up.

It should be noted that job embeddedness is not a unified construct; instead, it is a multidimensional aggregate of the on- and off-the-job forces that might keep someone at their job. Mitchell et al. (2001b) see job embeddedness as a higher-order aggregate of forces for retention. More specifically, its indicators are causes of embeddedness (MacCallum & Browne, 1993) and are formed as a mathematical functions of each dimension. Law and Wong (1998) classified this as an aggregate model and compared it with latent model. The major differences between latent and aggregated models are: the latent model views the dimensions as common factors underlying the indicators and operationalizes the overall multidimensional construct as a higher-order factor underlying the dimensions; whereas the aggregated model is an algebraic composite formed by the dimensions and specific variances and group variances, which are also part of the true variance of the construct, where only random variances are considered as error variances.
FIGURE 1.  
Six Dimensions of Job Embeddedness.

<table>
<thead>
<tr>
<th></th>
<th>Links</th>
<th>Fit</th>
<th>Sacrifice</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-the-Job embeddedness</td>
<td>Organizational link: the formal and informal connections that exist between an employee, other people, or groups within the organization</td>
<td>Organizational fit: an employee’s perceived compatibility or comfort with an organization.</td>
<td>Organizational sacrifice: the perceived cost of material or psychological benefits that may be forfeited by leaving one’s job.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-the-Job embeddedness</td>
<td>Community link: the connections that exist between an employee and other people, or groups within the community.</td>
<td>Community fit: how well a person perceives he or she fits the community and surrounding environment.</td>
<td>Community sacrifice: the perceived cost of material or psychological benefits that may be forfeited by relocating one’s community</td>
</tr>
</tbody>
</table>

Previous studies on job embeddedness

Mitchell and his colleagues (2001b) found that job embeddedness predicts voluntary turnover and explains significant incremental variance over and above job satisfaction, organizational commitment, job alternatives and job search. Mitchell, Holtom, Lee and Graske (2001a) showed how to use job embeddedness for developing an effective retention policy. Also Mitchell and Lee (2001) presented both the unfolding model and job embeddedness and the integration of the unfolding model and job embeddedness. Maurer, Lee and Mitchell (2003) showed how to retain technical professionals by using job embeddedness. Holtom and O’Neill (2004) tested the effects of job embeddedness with a sample of employees from a hospital and the results were similar to Mitchell et al. (2001a) and concluded that the results supported the fact that organizations need to be concerned about the employee’s lives both on and off the job. Yao et al. (2004) explained in more detail the measurement of job embeddedness. Lee et al. (2004) focused on two separated job embeddedness dimensions (i.e. on and off-the job embeddedness) and showed that off-the-job embeddedness predicted voluntary turnover and volitional absences but on-the-job embeddedness predicted organizational citizenship and job performance. Lee et al. (2004) also found that embeddedness moderated the effects of absences, citizenship and performance on turnover. Holtom and Inderrieden’s (2006) results show how job
embeddedness explains significant incremental variance over and above job satisfaction. Moreover, job embeddedness is higher among those who stay in jobs than for those who leave. They found that job embeddedness mitigates the effects of the shocks in the unfolding model. Allen (2006) found that only on-the-job embeddedness is negatively related to turnover and it mediates the relationship between socialization tactics and turnover. Thus, these studies have proved that job embeddedness is considered to be an important new variable for the turnover studies.

**Off-the-job embeddedness and its assumptions**

Job embeddedness is multidimensional aggregate of the on- and off-the-job forces to retain valuable employees. Off-the-job embeddedness in this construct is based on the assumptions that individuals relocate their places when they get a new job. In some situations, taking a job in different organizations does not necessarily involve in moving to different community. This is less likely to occur when the connections that exist between employee and other people within the community are scarce.

However, one of the key problems with job embeddedness is that off-the-job embeddedness might not apply to East Asian countries, such as Korea. Six studies (Kim, 2005a; Kim, 2005b; Lee, 2002; Park, 2005; Park & Lee, 2004; Ryu, 2005) examined job embeddedness in Korea and these studies only focused on the effects of on-the-job embeddedness. Only one study (Kim, 2005a) measured both on-the-job embeddedness dimensions and the off-the-job embeddedness but off-the-job embeddedness was not significant. Previous Korean studies did not explain explicitly the reason they used only on-the-job embeddedness dimensions but we may infer that most of companies are located at the big city such as Seoul and people seldom move to different city when they get a new job, also the connections between employee and other people within the community are not strong or tight. Thus, we think that overall job embeddedness will improve the prediction of intent to quit controlling job attitudes, but when we separate job embeddedness into each dimensions, off-the-job embeddedness will not improve the prediction of intent to quit controlling job attitudes.

**Hypothesis 1.** Job embeddedness is negatively correlated with employee intent to quit.

**Hypothesis 2.** Job embeddedness improves the prediction of intent to quit, going above and beyond that accounted for by job satisfaction and organizational commitment.

**Hypothesis 3.** Off-the-job embeddedness does not significantly improve the prediction of intent to quit, going above and beyond that accounted for by job satisfaction and organizational commitment.

**AN EAST ASIAN (KOREAN) CONTEXTS AND SUBJECTIVE NORMS**

Culture forms shared meaning and understanding and explains the social context (Kim & Nam, 1998). Kim and Nam show how the concept of ‘face’ affects organizational behavior in Asia. East Asian culture (especially Korea) is characterized by collectivistic and Confucius
culture (Kim & Nam, 1998). Englehart (2000: 549) claims that, "Asian cultures are characterized by a set of values that includes obedience to authority, intense allegiance to groups, and a submergence of individual identity in collective identity."

Hsu (1944) explained that two different orientations with respect to interpersonal relationship are developed in the mechanism of socialization; suppression and repression. Individualistic society is more likely to embrace repression and collectivistic society is more likely to employ suppression. Repression shows that people are socialized to appraise their actions based on their judgment and conscience. Suppression refers to “restraint from certain actions because of external circumstances (Hsu, 1944: 223). Individuals behave based on external evaluation and they rely heavily on external factors or cues to regulate their behavior.

Moreover, influenced by Confucianism, people are more aware of the relationship with others and concerned about other people’s judgment (Kim & Nam, 1998). Confucianism gives a broad set of values and expectations and influences individual behavior in East Asian countries (Ma & Smith, 1992). It focuses on particularly five human relationships: affection between father and son, loyalty between sovereign and subject, the distinction between the roles of husband and wife, courtesy of the young for the old, and trust between friends. The principles of Confucianism are prevalent in many aspects of relations in Korea.

Collectivistic and Confucius cultural characteristics constrain individuals behaviors and make them aware of external factors. Also cultural characteristics act as a powerful social force to govern the individual’s decision making process (Kim & Nam, 1998). Ajzen’s (1991) theory of planned behavior claims that three factors (subjective norm, attitude toward the behavior, perceived behavioral control) affect individual’s behavior by shaping an individual’s intention to perform behaviors.

Subjective norms are closely related to the effects of an East Asian culture. A subjective norm is defined as “the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991: 188). Subjective norms are based on normative beliefs, which are a person’s thoughts about “the likelihood that important referent individuals or groups approve or disapprove of performing a given behavior” (Ajzen, 1991: 195). The subjective norm is a “function of the person’s beliefs about what specific important others (i.e. family, friends and colleagues) think should be done (normative beliefs, or NBs), weighted by the motivation to comply with these others (MCs)” (Hom, Ralph Katerberg, & Hulin, 1979). Perceived social pressure from other’s opinions may affect individuals’ turnover decision making. Thus, we suggest that subjective norms may predict the involuntary turnover.

Hypothesis 4. Subjective norms improves the prediction of intent to leave, going above and beyond that accounted for by job satisfaction and organizational commitment.
METHODS

Sample
An employee survey was conducted. Personal characteristics, job satisfaction, organizational commitment, subjective norm and job embeddedness were assessed with self-reported measures. Surveys were distributed randomly to employees (Korea University alumnus) from various companies. The employees had options to either take paper survey or an online-survey. We collected 304 samples but in the analysis a total of 247 surveys were used. We dropped the surveys that had same IP-addresses (redundant samples) in the online-samples and had no identifying information or were identifiable but blank. The average age of respondents was 31.4 years old (s.d.=6.2) and 48.6 percent were women. 63.6 percent of respondents were married. The average of years worked in their current organization was five years. The respondents were different from each other in terms of sex, gender, and job position and those were used as a control variable throughout the analyses.

Measures

Personal characteristics such as age, gender, marital status, job level, job type were measured at the end of the survey. In addition, the years one has worked in the job, organization, and industry were measured by link-organization survey items.

Job satisfaction refers to “how people feel about their jobs and a related constellation of attitudes about various aspects of the job” (Spector, 1997). To assess job satisfaction, I averaged a composite of all six items from Price and Mueller’s scale (1981). In this research, the reliability coefficient (α) was .87.

Organizational commitment is defined as an individual’s acceptance of the organization’s goals, values, and willingness to exert effort for the organization and a desire to maintain membership (Mowday, Porter, & Steers, 1982). The original OCQ has fifteen items. The shorter version of the OCQ (Mowday et al., 1982) has nine items (Bishop & Scott, 2000; Price, 1997; Reichers, 1985). The reliability coefficient (α) was .93.

Intentions to leave were assessed by two items were adapted from the Michigan Organizational Assessment Questionnaire (Caamann, Fichman, Jenkins, & Klesch, 1979): ‘It is likely that I will actively look for a new job in the next year’, and 'I often think about quitting’. Three items were used from Hom et al. (1984): "Do you intend to leave the organization in the next 12 months?" "How strongly do you feel about leaving the organization within the next 12 months," and "How likely is it that you will leave the organization in the next 12 months?" In the analysis, we averaged items (α = .95).

The items were used to assess subjective norm from Newman (1974). The opinions that the respondents would respect are from family, relatives, and friends. The question for normative belief is “Family, relative and friends, whose opinion I respect, think I should stay at the organization”. The scale of motivation to comply is from 0 to 6. Subjective norm is calculated by the formula, Σ(NBs*MC). We only measured the opinion from non-work related members. We
wanted to measure non-work factors since we claim that subjective norm may be a better predictor than off-the-job embeddedness.

The items used to assess job embeddedness came from the work by Mitchell, Lee and colleagues (Lee et al., 2004; Mitchell et al., 2001b). It should be noted that job embeddedness is not a unified construct, instead it is a multidimensional aggregate of the on- and off-the-job forces that might keep someone at their job. The authors (Mitchell et al., 2001b) did not expect the six dimensions to be highly correlated with one another and we followed the five steps Mitchell et al. (2001b) provided and created weighted job embeddedness (Felps et al., 2009). Felps et al. (2009) discussed about strengths and weaknesses of the weights mean in the paper.

Results

Table 1 reports the means, standard deviations and correlation coefficients between dependent, independent, and control variables. Table 2 represents the results of the hierarchical regression analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>31.44</td>
<td>6.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.49</td>
<td>.50</td>
<td>-.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work position</td>
<td>2.09</td>
<td>1.34</td>
<td>.81</td>
<td>-.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job satisfaction</td>
<td>4.78</td>
<td>1.12</td>
<td>.37</td>
<td>-.15</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Organizational commitment</td>
<td>4.66</td>
<td>1.18</td>
<td>.36</td>
<td>-.11</td>
<td>.37</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Job embeddedness</td>
<td>3.50</td>
<td>.96</td>
<td>.41</td>
<td>-.19</td>
<td>.43</td>
<td>.73</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Subjective norms</td>
<td>17.67</td>
<td>8.42</td>
<td>.35</td>
<td>-.28</td>
<td>.28</td>
<td>.52</td>
<td>.60</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>8. Intent to quit</td>
<td>3.47</td>
<td>1.78</td>
<td>-.30</td>
<td>.17</td>
<td>-.24</td>
<td>-.68</td>
<td>-.58</td>
<td>-.64</td>
<td>-.4</td>
</tr>
</tbody>
</table>

_Hypothesis 1 posited a negative relationship between a negative relationship between job embeddedness and intent to quit. Table 1 shows a negative and significant relationship between job embeddedness and intent to quit (r = -.64, p < .01). We tested that job embeddedness would predict intent to quit even when job satisfaction and organizational commitment are controlled for (Hypothesis 2). As show in Table 2, job embeddedness improves the prediction of intent to quit, going above and beyond that accounted for by job satisfaction and organizational commitment (β = -.290, p < .01). However, we need to be cautious about the findings. We used_
the weighted job embeddedness and it implies that some dimensions may contribute more to job embeddedness. We looked at the bivariate correlation between job embeddedness and on-the-job embeddedness and it was .97. The correlation between job embeddedness and off-the-job embeddedness was .17. Therefore, on-the-job embeddedness contributes to most of the relationship between job embeddedness and intent to quit. This finding is not surprising that we expected on-the-job embeddedness significantly explain the variance of intent to quit and we hypothesized off-the-job embeddedness would not improve the prediction of intent to leave (Hypothesis 3). Surprisingly, off-the-job embeddedness was significant ($\beta = .098, p < .01$) but in the opposite way we predicted. Since the correlation between off-the-job embeddedness and intent to quit is negative ($r = -.11, p < .1$), this opposite outcomes may be due to the spurious effects. Thus, it is inconclusive about relationship between off-the-job embeddedness and intent to quit.

Hypothesis 4 posits that subjective norm would predict intent to quit when job satisfaction and organizational commitment are controlled. As show in Table 2, subjective norms marginally improves the prediction of intent to quit, going above and beyond that accounted for by job satisfaction and organizational commitment ($\beta = -.101, p < .1$).

**TABLE 2.**
Hierarchical Regression Results Examining the Influence of Job Embeddedness and Subjective Norms

<table>
<thead>
<tr>
<th></th>
<th>Intent to Quit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
</tr>
<tr>
<td>Age</td>
<td>-.082</td>
</tr>
<tr>
<td>Gender</td>
<td>.063</td>
</tr>
<tr>
<td>Work position</td>
<td>.101</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-.518***</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>-.217***</td>
</tr>
<tr>
<td>Job embeddedness</td>
<td>-.290***</td>
</tr>
<tr>
<td>Off-the-job embeddedness</td>
<td></td>
</tr>
<tr>
<td>Subjective norms</td>
<td></td>
</tr>
</tbody>
</table>

$R^2$ | .487  | .516  | .495  | .493  |
$\Delta R^2$ | .029*** | .008** | .006* |

a. To enhance ease of interpretation, we report standardized coefficients.

* $p < .1$ ** $p < .05$ *** $p < .01$
DISCUSSION

Job embeddedness is a fairly new concept and gives new directions to the voluntary turnover literature. We found that job embeddedness significantly explained the variances which job satisfaction and organizational commitment have not. Johns (2006) mentioned the importance of context on organizational behavior and we examined the effects of job embeddedness on intent to leave in the context of an East Asian culture, especially Korean culture. We replicated the study about the effects of job embeddedness and found that job embeddedness is meaningful in the context of Korean culture but only on-the-job embeddedness significantly predicts the intent to leave.

Off-the-job embeddedness was not well applied in the different context. Without off-the-job factors, the uniqueness of the job embeddedness construct may decrease the meaning on application at the real work place. Thus, we suggest that subjective norms are potential contenders for off-the-job embeddedness in Korea. Collectivistic and Confucius cultural characteristics in an East Asia, make individuals to be aware of external cues and other’s judgment and influence the decision making process and constrain the individual’s behavior. Subjective norms are suitable to capture different cultural context and we found that subjective norms marginally improve the prediction of intent to quit.

One of practical implications for subjective norms is that organizations take more attention to how employees’ reference groups (e.g. family, friend) see the company. The perception on image of organizations of reference groups may create social force to constrain employee’s turnover behavior. Normative belief that people follow their family and friends’ opinion on turnover is strong in a certain context. To retain valuable employees, organizations need to concern the opinion of the family and friends. In order to manage the image of the organization, organizations need to provide family-friendly programs. For example, if organizations offer a learning program like “To be a good father”, this would provide a signal to the employees’ family that organizations really care about the employee and his or her family. Also providing on-site child care, home-buying assistance or support family-friendly work arrangements may help the public image of organizations.

Moreover, we asked the respondents such open-ended questions as: “what make you stay in an organization” and “what is the most important thing when considering to quit your job?” The answers were mostly about fit with value and vision of organization, career development, and a good relationship with co-workers. Salary or perks were the least important to the respondents. These results are aligned with fit dimensions of on-the-job embeddedness. This may imply that organizations need to focus more on fit than tangible compensation. Holtom, Mitchell and Lee (2006) provide some suggestions to improve fit-organization dimension. For example, organizations assist employees in career planning that their long-term career goal can be met by training and developing their skills. They also suggest developing schedules that fit their needs (full-time or part-time status, shift, hours).
LIMITATIONS AND FUTURE RESEARCH

Despite the potential importance of these findings, this study is not without limitations. First, we assumed that intent to quit leads to actual turnover. We faced difficulties to get actual turnover data and information and assessed the intent to quit instead of actual turnover. There may be complex psychological processes going on between actual turnover and intent to leave and individuals with high response on intent to leave may not actually move to a new organization. The macro factors such job availabilities in the market or recession may play roles. However, Ajzen (1991) claims that belief and intention guide behavior and lead to actual behavior. Second, common method bias may impose threats on validity. Without measuring actual turnover, common method bias cannot be corrected. In the future study, we need to look at the actual turnover data.

For future studies, further development of the off-the-job embeddedness measurement is required and adjusted to specific cultural context. Also considering the link dimension, social network may be related and worthwhile to consider. Felps et al. (2009) examined how coworkers’ job embeddedness affects individual behavior. In the social network view, future studies may look at how dense the networks are and which critical link may come into play in turnover decision.

In addition, future studies need to look at different moderators relationship between job embeddedness and turnover. In the similar cultural background, organizational turnover culture may moderate the relationship between job embeddedness and voluntary turnover. Turnover culture may act as normative belief held by employees that turnover behavior is appropriate. Ken and Slocum (1987) and Kopelman and colleagues (1990) argued that organizational cultural values may relate to the differences in employee retention. Thus, understanding how shared perceptions affect turnover decisions will help manage turnover on an organizational level and give insights to lead effective management of turnover (Abelson, 1993; Rumery, 2003).

REFERENCES


The relationship between individual characteristics, attitudes, and career withdrawal

Randi L. Sims, Ph.D., Nova Southeastern University, sims@nova.edu
Jess J. Boytell, DPA, Nova Southeastern University, boytellj@nova.edu

ABSTRACT

This paper proposes that job withdrawal models may generalize to help better understand and predict career withdrawal. A sample of 141 real estate professionals were surveyed to test the proposed model of career withdrawal. Avoid goal orientation, full-time job status, career satisfaction, career disappointment, and career choice regret were regressed on three measures of career withdrawal. The results of the hierarchical regression were statistically significant, with the model explaining 50% of the variance in expressed career withdrawal intentions and behaviors. Implications of the findings for managers and researchers alike are provided as are recommendations for future research.

Key words: goal orientation, career withdrawal, career satisfaction

The relationship between individual characteristics, attitudes, and career withdrawal

Given the costs associated with recruitment and training, the interest in employee turnover in the workplace is not surprising. In order to better understand and predict employee turnover, study has expanded to include not simply turnover and intention to turnover, but rather a wide variety of employee withdrawal thoughts and behaviors including absence, tardiness, and lollygagging. The current study further expands the turnover and withdrawal literature to encompass career withdrawal. This paper proposes that job and work withdrawal models may generalize to help better understand and predict career withdrawal intentions and behaviors. With the lengthy educational requirements for many careers and widespread worker shortages in careers like nursing and engineering (AP, 2008; Morsch, 2006), the importance in the study of career withdrawal grows, as does the need for a comprehensive, yet parsimonious model to better understand and predict such behaviors and intentions. This study further adds to the literature by substituting the often used measures of individual characteristics (i.e. personality and core traits) with the avoid goal orientation measure in an attempt to further examine the individual employee characteristic antecedents central in predicting and understanding job attitudes and work behaviors.
Job Withdrawal

Turnover is a widely studied construct and research has tied turnover and intention to turnover with dozens of work and employee related variables (see Cotton & Tulle, 1986; Tett & Meyer, 1993). A theoretical model of job withdrawal has been proposed by Hulin and expanded by his colleagues and former students over the years (see Brett & Drasgow, 2002 for a complete review). In part, this model proposes that worker and job characteristics are antecedents of withdrawal behavior. This relationship is mediated by employee job attitudes and affective reactions. See Figure 1 adapted from Probst (2002). Kohler and Mathieu (1993) tested a similar model using a sample of 194 bus drivers. Their findings provide support for the belief that affective responses mediate the influence of job and worker characteristics on absence. A brief review of the model and related research findings follows.

Figure 1: Hulin's model of job withdrawal

Antecedents
Worker characteristics
Job characteristics

Job Attitudes:
Job Satisfaction

Affective Reactions:
Anger, sadness, pleasure, anxiety, etc.

Consequences:
Job Withdrawal

Antecedents
Worker characteristics

The study of worker characteristics and their relationship to job satisfaction has been extensive. Conducting a meta-analysis, Judge and Bono (2001) studied individual core self-evaluations to determine their relationship to job satisfaction. Their findings indicate that self-esteem, internal locus of control, self-efficacy, and emotional stability are significant indicators of job satisfaction. In addition to these core traits, personality characteristics commonly labeled as the Big Five have also been studied to test their relationships with job satisfaction. Judge, Heller, and Mount (2002), conducting a meta-analysis, concluded that as a set, the Big Five personality dimensions were significantly related to job satisfaction. Similar conclusions were offered by Ones, Viswesvaran, and Dilchert (2005) and Cohrs, Abele, and Dette (2006). In an
attempt to further narrow the personality and trait characteristics most important to the study of job satisfaction, Judge, Heller, and Klinger (2008) combined both the core trait self-evaluations and the Big Five personality dimensions. Separately both were found to be significant factors in job satisfaction. However, when combined, core traits were better predictors of job satisfaction then were the Big Five factors.

Job Characteristics

Job characteristics commonly include Hackman's and Oldham’s core job characteristics of “task identity, skill variety, task significance, autonomy, and feedback” (1980; as cited in Judge, Bono, Erez, Locke, & Thoresen 2002, p. 61). Research has consistently found that these job dimensions are significantly related to job satisfaction (see Loher, Noe, Moeller, & Fitzgerald, 1985), although the relationships vary given individual demographic and personality factors (Seashore & Taber, 1975). In addition, Daniels (2000) found that job characteristics were also significantly related to many measures of affective well-being. Other job factors like part-time versus full-time status and union versus non-union status are also job characteristic antecedents to withdrawal behaviors and intentions (Probst, 2002).

Job Attitudes

Job Satisfaction is broadly defined as the positive or negative feelings one has towards his/her job (Ghazzawi, 2008). It is one of the primary job attitudes studied in respect to turnover, withdrawal intentions, and withdrawal behavior (see Locke, 1976). Findings have consistently found a negative relationship between job satisfaction and a wide group of withdrawal behaviors, although the strength of these negative relationships vary by the exact measure of the withdrawal behaviors (Hulin, 1990; Seashore & Taber, 1975). Thus, findings generally support the notion that dissatisfied employees are more likely to engage in thoughts and behaviors that fit within a general class of withdrawal behaviors and intentions.

AFFECTIVE REACTIONS

Affective reactions toward work include positive feelings like comfort and pleasure and negative feelings like anger and tiredness (Daniels, 2000). In addition, commitment has also been measured as an affective reaction toward work. Although Harrison, Newman, and Roth (2008) considered organizational commitment under the job attitude classification, they found support for the proposal that commitment (along with job satisfaction) were significant predictors of a general theme of job and work withdrawal thoughts and behaviors.

Consequences - Job Withdrawal
Withdrawal encompasses the behaviors which distance employees from unfavorable work situations (Hulin, 1990). Early views of employee withdrawal focused almost entirely on turnover and the more readily measured, intention to turnover (see Steel & Ovalle, 1984). Yet the turnover process may begin much earlier for employees. Mobley (1977) and Mobley, Horner, and Hollingsworth (1978) suggested a more heuristic model of turnover that includes the thought processes, review of alternative job markets, and analysis of the costs associated with leaving one’s job prior to forming an intention to quit. In testing a similar proposition, Cheung (2004) found that many nurses reported thinking about leaving their professions for months or years and often began to prepare themselves for alternate careers through education and schedule changes before formally resigning. Theory also suggests that when turnover is not possible given market conditions (or other extraneous factors), other forms of withdrawal may be substituted as an employee response to unfavorable work situations (see Hulin, 1990 for a review). With these theories in mind, instead of focusing exclusively on turnover or intention to turnover, researchers have expanded their study to include other forms of withdrawal in the workplace. For example, while job withdrawal includes behaviors such as intention to quit, turnover, and retirement; work withdrawal includes behaviors such as tardiness, lollygagging, and task avoidance (Hanisch & Hulin, 1991). Independently any of these measures may not provide a complete picture of employee withdrawal behavior (see Hom, 2002). Employees may never be absent or tardy, but nevertheless be quite distant psychologically from their jobs and instead practice common task avoidance behaviors. Other employees may leave their positions due to health or family issues and not be psychologically distant or associated with an unfavorable work situation. In addition, some measures of withdrawal are mutually exclusive. If employees are absent, they cannot also be tardy or lollygagging. In light of the challenges with capturing a clear picture of withdrawal, Hom (2002) suggests that multiple measures be used to better assess the family of behaviors and thoughts associated with withdrawal. “A research strategy that studies aggregated measures of organizational withdrawal has the potential for greater understanding of the complex psychological process” (Hanisch, Hulin, & Toznowski, 1998, p. 476).

It is proposed that the general model of job and work withdrawal can be used to understand and predict career withdrawal. Necessary adjustments to the model and associated measurements of the constructs for the current study follow.

CAREER WITHDRAWAL

Holland’s (1996) career typology postulates that individuals with a poor fit between their personality and their vocation are less likely to be satisfied with their careers, have increased thoughts of changing vocations, and experience an unstable career path with shifts between differing vocations. This fits well with the general model of withdrawal behavior, as Holland’s
model suggests that the relationship between personality and career withdrawal thoughts and behaviors are mediated by career satisfaction. A similar model has also been suggested by London (1983) who studied the decisions individuals make in response to unfavorable career conditions. He postulates that individual characteristics combine with situational characteristics to impact career decisions. Nearly 40 different individual characteristics were considered including personality, self-esteem, goal flexibility, and fear of failure. The listings of situations and career decisions and behaviors were as extensive. The model proposed is understandably complex, given the wide variety of personality and other individual differences and situations which can combine to impact career decisions. However, it is very difficult to test such a comprehensive model. There are limits on the length of surveys employees are willing to complete. It is simply not reasonable to expect respondents to answer surveys that include hundreds of items. While it may not be reasonable to test London’s complete model of career withdrawal in a single study, some of London’s individual and situational characteristics are accounted for in Figure 1 as antecedents.

Prior research on job and work withdrawal focused primarily on the Big Five and core personality traits as important antecedents of withdrawal. London (1983) also included these and goal issues as well as the fear of failure among his listing of individual characteristics. The goal orientation adopted by an individual establishes their mental framework which is used in decision making (Silver, Dwyer, & Alford, 2006). In fact, Fortunato and Goldblatt (2006) suggest that an even better measure of underlying individual characteristics may be a measure of goal orientation. “Goal orientation actually may predict employees’ job-related behavior and attitudes better than [the Big Five and related personality constructs]” (p. 2176). One component of goal orientation is the dimension of goal avoidance which seems a good fit with London’s goal issues and fear of failure. VandeWalle (1997) defines avoid goal orientation as a desire to avoid disapproval which may be forthcoming because of a show of low ability. Those individuals scoring high on the avoid goal orientation dimension are likely to avoid tasks that have the potential to demonstrate poor performance. Instead of trying with a risk of failing, high avoid goal orientation individuals would rather not try at all. Since prior research seems to have fully covered the impact of the Big Five and core trait characteristics on job attitudes and affects, continuing to include the same measures does not allow for continued theory development. In addition, unlike the Big Five and core traits, research suggests that goal orientation can be modified through training and feedback (VandeWalle, Brown, Cron, & Slocum, 1999). If goal orientation is found to be a significant antecedent in withdrawal behaviors and intentions, employers could provide training to help employees shift their goal orientations to reduce withdrawal intentions. This is especially helpful for job classifications at risk of worker shortages. As such, this study includes avoid goal orientation as an antecedent to career withdrawal in place of traditional personality and trait measures.

Only one measure of job characteristic is considered in this study, that of full-time/part-time status. Additional measure of job characteristics include items like skill variety, task
identity, and task significance. It is proposed that as long as the subjects included in a study share the same or similar jobs, these measures of job characteristics should also be similar. In addition, while there may be individual differences in terms of direct supervision and thus autonomy and feedback, these too are likely to be similar within the same workgroup and organization as policy and procedures tend to be established on a company-wide basis.

Traditional theories linking job satisfaction and organizational commitment to withdrawal intentions may not be a good fit for those employed in specialized careers because many of those constructs are specifically tied to a particular organization and not to the career choice in general. Thus, groups of attitudes proposed in this study have been modified slightly to better reflect the issue of career attitude and affect. Career satisfaction has replaced job satisfaction and career disappointment and career choice regret are proposed as affective measures.

In keeping with the suggestions outlined above for using composite measures of withdrawal, multiple withdrawal thoughts and intentions have been measured. These include thoughts of leaving the profession, intentions to maintain professional licensure, and the time spent working outside of their current profession.

Given the modifications outlined above, the following model is proposed.

Figure 2: Proposed Model of Career Withdrawal

METHODOLOGY

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Procedures

Email messages were sent to all employees of one large real estate firm (N = 200) directing them to an online version of the survey. In addition, three branch offices were visited in person by a research assistant who distributed paper surveys to those present at the time.

Sample

Respondents were licensed real estate agents, brokers, or associate brokers in the Southeast region of Florida, US. A total of 141 completed surveys were received, 62% female and 38% male, with an average age of 46 years (s.d. = 13.21). Respondents reported that they had held their license for 9 years (mean = 9.43; s.d. 7.61) and most considered real estate a full-time position (75%).

Measures

**Avoid Goal Orientation.** Avoid goal orientation was measured by the average of a four item avoid goal orientation scale developed by VandeWalle (1997). All items were measured on a five point scale from 1 'strongly disagree' to 5 'strongly agree'. Sample items include “I prefer to avoid situations at work where I might perform poorly” and “I'm concerned about taking on a task at work if my performance would reveal that I had a low ability”. Higher scores are an indication of a stronger avoid goal orientation. VandeWalle reported an internal reliability measure of .88. Cronbach's alpha for this sample was somewhat lower at .73.

**Career Disappointment.** Career disappointment was measured as a single item (“I am disappointed in how things are going for me in the real estate profession right now”) measured on a five point scale from 1 'strongly disagree' to 5 'strongly agree'. Higher scores are an indication of greater reported disappointment for a career in real estate.

**Career Satisfaction.** Satisfaction with choice of careers was measured as the average of a three item scale measured from 1 'very dissatisfied' to 5 'very satisfied'. Higher scores are an indication of greater satisfaction with a career in real estate. The internal reliability measure for this scale was satisfactory (alpha = .83). Sample items include "On the whole, how satisfied are you with your present job in real estate when you consider the expectations you had when you first started?" and "How satisfied are you with the type of tasks you perform as a real estate professional?"
Career Choice Regret. Career choice regret was measured as a single item (“If I had it to do over again, I likely would not have entered the real estate profession”) measured on a five point scale from 1 'strongly disagree' to 5 'strongly agree'. Higher scores are an indication of greater reported regret for the selection of a career in real estate.

Career Withdrawal. Career withdrawal was measured as three independent items. Respondents were asked if they expected to keep their license active, if they thought often about expanding their non-real estate dealings, and how much time they spent on work outside of real estate (labeled keep, expand, and outside respectively). All items were measured on a five point scale from 1 'strongly disagree' to 5 'strongly agree'. Higher scores are an indication of greater career withdrawal. In keeping with prior research recommendations, we consider these three items a composite measure of withdrawal and not a single construct.

Demographics. Respondents reported their age, tenure, full-time/part-time status, and job classification.

RESULTS

Table 1 displays the descriptive statistics and intercorrelations for all study variables. No significant differences were found for any of the study variables based on gender.

Table 1
Intercorrelations and Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avoid Goal Orientation</td>
<td>3.60</td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Career Disappointment</td>
<td>2.85</td>
<td>1.17</td>
<td>.19*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Career Satisfaction</td>
<td>3.86</td>
<td>0.82</td>
<td>-.01</td>
<td>-.42**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Keep</td>
<td>2.34</td>
<td>1.17</td>
<td>.25**</td>
<td>.38**</td>
<td>-.31**</td>
<td>.42*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Expand</td>
<td>3.05</td>
<td>1.16</td>
<td>.13</td>
<td>.35**</td>
<td>-.26**</td>
<td>.19*</td>
<td>.25**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Outside</td>
<td>2.42</td>
<td>1.22</td>
<td>.16</td>
<td>.41**</td>
<td>-.40*</td>
<td>.43**</td>
<td>.30*</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
It was proposed that the general model of job and work withdrawal could be modified to also explain career withdrawal. In addition, it was also proposed that avoid goal orientation would be an adequate explanatory individual characteristic in the model. The data were tested using a hierarchical regression formula, entering the variables in order to match the model proposed in Figure 2. The results of the regression support the proposal, with the complete model accounting for 50% of the variance in reported intentions towards career withdrawal thoughts and behaviors (adjusted \( R^2 = 50 \)), see Table 2.

Table 2
Results of Hierarchical Regression on Career Withdrawal

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Beta</th>
<th>F</th>
<th>R²</th>
<th>Adj R²</th>
<th>Change R²</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Avoid Goal</td>
<td>0.23</td>
<td>0.15</td>
<td>0.10</td>
<td>4.69*</td>
<td>.04</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>Step 2 Full-time</td>
<td>-1.98</td>
<td>0.40</td>
<td>-0.33</td>
<td>21.25**</td>
<td>.26</td>
<td>.25</td>
<td>.22</td>
</tr>
<tr>
<td>Step 3 Career Satisfaction</td>
<td>-0.60</td>
<td>0.23</td>
<td>-0.18</td>
<td>22.26**</td>
<td>.36</td>
<td>.34</td>
<td>.10</td>
</tr>
<tr>
<td>Step 4 Career Disappointment Career Choice Regret</td>
<td>0.68</td>
<td>0.16</td>
<td>0.30</td>
<td>25.74**</td>
<td>.52</td>
<td>.50</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>0.59</td>
<td>0.15</td>
<td>0.26</td>
<td></td>
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*aFull-time is a dummy variable with part-time coded zero; *p < 0.05; **p < 0.01; n = 123.*

Since individual characteristics are considered antecedents to career withdrawal, avoid goal orientation was entered in the equation first. Although accounting for only a small proportion of the variance (adjusted \( R^2 = .03 \)) explained by the complete model, it nonetheless was statistically significant (\( F = 4.69; p < .05 \)). The findings indicate that employees with stronger tendencies toward an avoid goal orientation, are more likely to also indicate a greater likelihood of withdrawing from a career in real estate.

Full time status was also considered an antecedent of career withdrawal. As such, it was entered in the second step. The results indicate that full-time status was a significant predictor of career withdrawal (\( F = 21.25; p < .01 \)), accounting for an additional .22 of the variance in expressed withdrawal behaviors. The results indicate that full-time employees express fewer
intentions to withdraw from a career in real estate than do individuals employed part-time in the field.

Career satisfaction was proposed to mediate the relationship between individual and job characteristics and career withdrawal. Entered third in the equation, career satisfaction was found to be a significant mediator ($F = 22.26; p < .01$), accounting for an additional $.10$ of the variance in expressed withdrawal behavior. Employees who are less satisfied with their careers are more likely to indicate an expressed intention to withdraw from their careers.

Career disappointment and career choice regret, measures of affective reactions, were also proposed to mediate the relationship between individual and job characteristics and career withdrawal. Entered fourth in the equation, they were found to be significant mediators ($F = 25.74; p < .01$), accounting for an additional $.16$ of the variance in expressed withdrawal behavior. Employees with greater levels of reported career disappointment and greater levels of reported career choice regret were more likely to report greater expressed withdrawal thoughts and behaviors.

**DISCUSSION**

Individual employee characteristics, combined with job requirements and attitudes are of interest to managers and researchers alike if they can be used to predict and understand the construct of career withdrawal intentions and behaviors. This study included avoid goal orientation as the measure of individual characteristic antecedent to career withdrawal intentions and behaviors. Given the public nature of real estate sales, the success level of real estate professionals tends to be quite open to co-workers and customers alike. Thus, under-performing employees may be unable to hide their poor performances, which may make the avoid goal orientation an even stronger predictor for career withdrawal for this particular group. Prior research (Fortunato & Goldblatt, 2006) suggested that goal orientation may be a better predictor of job-related behaviors than core personality traits or the Big Five. Our results did not find support for that proposition. Although significantly related, avoid goal orientation explained only a very small part of the overall model and its impact was greatly reduced once other factors were entered into the equation. This was disappointing given research support for the notion that goal orientation can be shifted through training and feedback. Had the results offered stronger support for the avoid goal orientation as an individual characteristic antecedent, it would have provided employers with a possible means for modifying withdrawal intentions and behavior. Core personality traits and the Big Five dimensions as antecedents do not provide for such training and feedback influence by employers for current employees. Avoid goal orientation may be even less likely to be a significant individual characteristic for expressed intentions for career withdrawal for employees employed in fields without an open system of reporting performance. While individual supervisors may be aware of poor performance, it is unlikely that poor performance would be widely publicized in most non-sales career fields. It may be that other
measures of goal orientation (learning and prove) would be better predictors of withdrawal behavior than the avoid dimension. Future research should consider those dimensions of goal orientation as possible individual characteristic antecedents of career withdrawal intentions and behavior.

This study included full-time status as the job characteristic antecedent to career withdrawal intentions and behavior. The findings suggest that this job characteristic was a significant factor in the model. However, the potential measures for other types of job characteristics is quite great. The sample tested in this study had the advantage of including only one job type. Holding potential differences in job characteristics constant allowed for a more parsimonious model without the need for an expanded survey. Although additional job characteristics been measured beyond full-time status, the variance in reported career withdrawal explained may have been increased. Future researchers may wish to include additional measures of job characteristics as even those holding the same job type may experience variance in their reported levels of autonomy and feedback even if the task identity, skill variety, and task significance remained constant.

Past research has overwhelmingly supported the importance of job satisfaction as a mediator for job withdrawal intentions and behaviors. The finding that this relationship holds for career satisfaction and career withdrawal is important, as the ability of management theory and research to generalize to a wide variety of circumstances is of upmost importance. Theory and research that has only a limited scope is of less value in our understanding of employee attitude and work behaviors. The findings of this study offer very strong support that the affective reactions of career disappointment and career choice regret are mediators in the relationship between individual and job characteristic antecedents and career withdrawal intentions and behaviors. Affective reactions such as these are easily measured and are likely to come quite early in the long process of withdrawal postulated by Mobley and his colleagues.

As with all research, this study does have some limitations. First, all the data were collected as self-report measures and have the potential for respondent error. Using an anonymous survey does lessen this effect somewhat, however. In addition, there is also the potential for non-response error without a 100% response rate. While efforts were made to increase participation with reminder emails and one follow-up visit to three branch offices, some employees still elected not to participate. It may be that non-respondents have significantly different views than respondents.

Overall, the results of this study offer strong support for the use of the general model of job and work withdrawal to understand and predict career withdrawal behaviors. As a rather simple model, it should be easily testable in a wide variety of fields in order to test its ability to generalize across situations and vocations.
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PSYCHOLOGICAL CAPITAL AND PERFORMANCE IMPACT IN EDUCATIONAL ORGANIZATIONS

Travis P. Searle, University of Nebraska, searle.travis@huskers.unl.edu

ABSTRACT

Psychological capital has shown to have performance impact within a variety of business organizations. Scholars have yet to consider fully the impact of psychological capital within educational organizations. Traditionally, educational organizations have been concerned with other forms of capital (i.e., human, social, and financial capital), thus it is proposed that a fourth form of capital needs to be considered. Educational organizations have not considered the development of psychological capital in their teachers and students. This paper proposes a framework for considering psychological capital (PsyCap) in educational organizations for performance impact. This paper discusses some proposed relationships and provides some directions for future research.

Positive psychology has started to receive considerable attention by academia in the last decade (Lopez & Snyder, 2003; Seligman, 2006; Snyder & Lopez, 2002). Researchers are beginning to focus on understanding the “conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions” (Gable & Haidt, 2005, p. 104). This positive focus is in contrast to the more traditional emphasis on the maladaptive behaviors of individuals, groups, and institutions (Seligman & Csikszentmihalyi, 2000). One promising stream of research within this general positive psychology emphasis has been the focus on positive psychology within organizations and the workplace. This emphasis on positive organizational behaviors (POB) (Luthans, 2002a, 2002b) extends the positive psychology research into the work setting. POB is specifically focused on researching the performance impact that positive psychology variables have in organizations. This line of research has found that POB variables can impact work performance (Luthans, Avolio, Walumbwa, & Li, 2005; Peterson & Byron, 2008; Peterson & Luthans, 2003; Youssef & Luthans, 2007). In addition, this positive approach to research in organizations has found a new emerging positive psychology variable called psychological capital (PsyCap) (Luthans, Youssef, & Avolio, 2007). This higher order construct is able to be developed (Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004), and has led to positive performance impact (Luthans, Avolio, Avey, & Norman, 2007; Luthans, Youssef, & Avolio, 2007). This research has looked at PsyCap in a variety of business organizations. However, one organizational context that has received limited research to date on the effects of PsyCap on performance is the educational organization (i.e., public schools, private schools, charter schools, universities and colleges).
Typically organizations have been concerned with financial capital, human capital, and social capital (Luthans, Luthans, Luthans, 2004; Luthans & Youssef, 2004; Luthans, Youssef, & Avolio, 2007). Educational organizations have been no exception. Research has shown that increased levels of financial capital (Marks, Cresswell, & Ainley, 2006; Parcel & Dufur, 2001), human capital (Benner, Graham, & Mistry, 2008; Parcel & Dufur, 2001), and social capital (Stewart, 2008; Yan & Lin, 2005) all contribute in varying degrees to an increase in academic achievement of schools and students. However, researchers have yet to fully consider a newly emerging form of capital entitled psychological capital (PsyCap), and its role in academic achievement. Initial exploratory research shows potential effectiveness of considering psychological capital in the educational setting (Luthans, Avolio, Avey, & Norman, 2007). The purpose of this paper is to introduce a conceptual model that integrates the positive psychology variable of psychological capital with performance impact in educational settings.

This paper will review the beginning of positive psychology, and its implications for educational organizations. Furthermore, the emerging field of positive organizational behavior, and its implications to the educational organization will also be discussed. Finally, a conceptual model introducing psychological capital to the educational field as a predictor of performance impact for both teachers and students will be highlighted.

PSYCHOLOGICAL CAPITAL AND EDUCATIONAL ORGANIZATIONS

Positive Psychology

Since World War II psychologists have primarily focused on the maladaptive behaviors and weaknesses of individuals. This focus on the negative, has allowed researchers to make substantial progress in the curing and diagnosis of mental illnesses (Seligman & Csikszentmihalyi, 2000). This focus on what is wrong with people, has led to psychologists underemphasizing another purpose of psychological research, and that is to increase the positive development, strength, and capacities of individuals, organizations, communities and society (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001). This deficiency in research on the positive has led scholars to re-emphasize the importance of well-being, and the positive development of individuals. This realignment has led to the newly emerging positive psychology field, and has ignited a stream of research that is no longer exclusively focused on fixing the mental illnesses of individuals.

Positive Psychology and Implications for Educational Organizations

Educational organizations have been borrowing the theories and research of psychology for decades (Ormrod, 2004). This paper is by no way suggesting that this is the first time educators have ever considered implementing a psychological variable, theory, or positive approach to education. Furthermore, like psychologists, educators have often been consumed by
In the problems that they see in their students, and are consumed with fixing the weaknesses of their students, while neglecting to see their positive strengths and qualities. Larson (2000) stated “we have numerous research-based programs for youth aimed at curbing drug violence, suicide, teen pregnancy, and other problem behaviors, but lack a rigorous applied psychology of how to promote positive youth development” (p. 170).

As a result, researchers are calling for education to include content and programs to develop the positive strengths and qualities of students (Call et al., 2002; Gomez, 2007; Flay, 2000; Larson, 2000; Martens & Witt, 2004; Pajeras, 2001; Sheridan et al., 2004). It is anticipated that this proactive positive approach may prevent problem behaviors in students (Flay, 2002; Reddy, Newman, Thomas, & Chun, 2009; Seligman, 2002), and initial research is beginning to show that students that have positive psychology variables are able to achieve more in the classroom (Pajares, 2001). Similarly, positive behaviors are also being shown to improve the performance of schools. In a three year longitudinal study of school wide positive behavioral approaches researchers found that there was a decrease in suspensions and an increase in standardized math and reading scores when a school wide positive behavioral approach was implemented (Lassen, Steele, & Sailor, 2006). Furthermore, positive psychologists have suggested that positive emotions can broaden the array of thoughts and actions that come to mind (Fredrickson, 2000). This may also influence academic achievement in educational organizations. Finally, researchers have found success in developing positive psychology variables in business organizations (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, Avey, & Patera, 2008), and in athletics and educational settings (Luthans, Avolio, Avey, & Norman, 2007; Snyder, 1994, 2000).

**Positive Organizational Behavior (POB)**

When positive psychology was in its infancy, scholars began a positive psychology conference where scholars and practitioners could come together to discuss their research on positive psychology. One well-known organizational behavior scholar, Fred Luthans, attended one of these initial positive psychology conferences, and while listening he began to have a paradigm shift on his perspective of the field of organizational behavior (Luthans, 2002a, 2002b; Luthans & Avolio, 2009; Luthans, Youssef, & Avolio, 2007). As he was listening, he began to reflect on what was being presented, and his previous work in self-efficacy and the work place (Stajkovic & Luthans, 1998a, 1998b), and realized the impact that positive psychology could have on the organizational behavior field. Luthans (2002b) stated "we have been more concerned with what is wrong with organizations, teams, leaders, and employees than what is right with them" (Luthans, 2002b, p. 59). As a result, he decided to pursue researching positive psychological variables in relation to organizations and the work place. He called this positive organizational behavior or (POB) (Luthans, 2002a, 2002b). This has ignited a flood of research into the impact of positive psychology within business organizations. For example, researchers have found that hope can lead to higher performance and greater satisfaction (Peterson & Bryon,
2008; Peterson & Luthans, 2003). Other variables such as optimisms (Seligman, 2006), self-efficacy (Stajkovic & Luthans, 1998a, 1998b; resiliency (Youssef & Luthans, 2007) have all been found to increase work performance.

Luthans criteria for inclusion into POB consisted of the positive variable having strong research, theory, valid measurement, had to be state like or open to development, and can lead to increased performance (Luthans, Youssef, & Avolio, 2007). Luthans has highlighted hope, self-efficacy, resiliency, and optimism as positive psychology variables that fit the POB criteria. More formally, POB was defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002a, p. 698). Luthans has also suggested other possible positive psychological variables such as wisdom, creativity, flow, and emotional intelligence (Luthans, Youssef, & Avolio, 2007) as potential future contributors of POB. Currently these variables either lack strong theory, or an empirical measurement that is reliable and valid.

**Positive Organizational Behavior and Implications for Educational Organizations**

The four POB variables of hope, self-efficacy, resiliency, and optimism have all been studied to varying degrees in their relation to academic achievement. One of the first positive psychological variables studied by educational researchers was resiliency. Educational researchers were interested in studying at-risk youth, and their ability to positively adapt to contexts of significant adversity or risk. They labeled this phenomenon resiliency (Masten, 1994, 1999; Masten & Reed, 2002). Students with greater resiliency seem to do better academically, and resiliency seems to increase academic achievement in a variety of settings and populations (Borman & Overman, 2004; Gordon, 1995, 1996; Kwonk, Hughes, & Luo, 2007; Morrison & Allen, 2007).

Another POB variable that has led to an increase in academic achievement is the study of hope. Hope theory consists of individuals cognitively analyzing the routes to their goals (waypower), and their motivation in starting and maintaining the route to their goal (Snyder, 1994, 1995; Snyder et al., 1991). Research has shown that high hope individuals are able to generate multiple goals in a variety of aspects of their life. They are able to generate multiple ways of obtaining their goals, they are not discouraged by failures, and they achieve more in their life than do low hope individuals (Snyder, 1994; 2000). Hope is one of the most well researched positive psychological variables, and has strong theory, research, and empirical measurements (Luthans, 2002a, 2002b; Snyder, 1994; Snyder et al., 1991; Snyder et al., 1996; Luthans, Youssef, & Avolio, 2007). In addition, researchers have found that hope leads to higher academic performance in children, adolescents, and college students (Curry, Snyder, Cook et al., 1997; Curry & Snyder, 2000; Gilman, Dooley, & Florell, 2006; Peterson, Gerhardt, & Rhode, 2006; Snyder et al., 1991; Snyder, Shorey, Cheavens et al., 2002; McDermott & Hastings, 2000).
A third POB variable that has received research in the educational setting is optimism. Optimism is concerned with how individuals explain successes and defeats. An optimistic person contributes their success to their skills, traits, or characteristics. A pessimistic individual attributes their successes to chance or the situation (Seligman, 2006). Furthermore, optimistic individuals explain their failures as occurring because of specific challenges, whereas pessimistic individuals explain their failures by blaming their lack of skills, traits, or characteristics (Seligman, 2006). Researchers have shown that individuals with a more optimistic explanatory style will outperform those individuals that have a pessimistic explanatory style in the academic setting (Carver & Sheier, 2002; Huan, Yeo, Ang, & Chong, 2006; Ruthig, Perry, Hall, & Hladkyj, 2004; Seligman, 2006; Smith & Hoy, 2007).

The final positive organizational behavior variable is self-efficacy. Self-efficacy is concerned with an individual’s belief (i.e., confidence) of accomplishing a task (Bandura, 1998). Self-efficacy is the most popular positive psychology variable used in the educational setting, and has strong research and theory supporting its effect on academic achievement (Bandura, 1998).

Psychological Capital (PsyCap)

Psychological capital (PsyCap) has its origins in positive organizational behaviors and positive psychology (see figure 1). As previously mentioned Luthans (2002a, 2002b) started the POB stream of research, which is essentially looking at the positive psychology variables in workplace setting and organizations.
While studying hope, optimism, self-efficacy, and resilience within the workplace, Luthans found that these four variables interacted to form a higher order construct that increases performance, satisfaction, and commitment beyond the summation of these four variables (Luthans, Avolio, Avey, & Norman, 2007; Luthans, Norman, Avolio, & Avey, 2008; Luthans,
Youssef, & Avolio, 2007). This higher order construct has been named psychological capital or (PsyCap). Psychological capital has been formally defined as

“an individual’s positive psychological state of development characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans, Youssef, & Avolio, 2007, p. 3).

PsyCap has been suggested to be a form of capital similar to financial capital, human capital, and social capital (Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004).

Psychological capital has been shown to increase academic achievement in a sample of management students (Luthans, Avolio, Avey, & Norman, 2007). PsyCap was also found to mediate between supportive climate and employee performance (Luthans, Norman, Avolio, & Avey, 2008), predict positive emotions (Avey, Wernsing, & Luthans 2008), predict extra role organizational citizenship behaviors, and also be negatively related to organizational cynicism, intentions to quite, and counterproductive workplace behaviors (Avey, Luthans, & Youssef, (in press). This research is strong evidence that suggests the performance impact that PsyCap can have in organizations. Consequently all types of organizations need to consider PsyCap, in addition to other forms of capital (i.e., financial capital, human capital, and social capital) if they desire to increase performance. This is made possible because organizations can increase their employees PsyCap in relatively short training periods because of its developmental nature (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, Avey, & Patera, 2008).

Psychological Capital (PsyCap) Implication for the Educational Field

As has been shown in this review, educational researchers have looked at a variety of positive psychology variables within educational settings, and have found that they have led to an increase in academic performance. Educational scholars have already suggested the use of psychological variables in the educational setting (Pajares, 2001), and a variety of scholars have looked at positive organizational behavior variables within educational settings. These scholars have found that the positive organizational behaviors of hope, optimism, self-efficacy, and resiliency have led to an increase in academic achievement (Bandura, 1998; Masten & Reed, 2002; Seligman, 2006; Snyder, 2005). However, researchers have yet to fully consider the impact of psychological capital on performance within educational organizations.

Educational scholars have traditionally looked at the impact of financial capital, human capital, and social capital on academic performance. These forms of capital have been analyzed by looking at the individual’s financial, human, and social capital. The families’ financial, human, and social capital, and even the schools financial, human, and social capital (Parcel & Dufur, 2001; Schickedanz, 1995). For example, the financial capital of school and families have
been related to academic achievement of students (Parcel & Dufur, 2001), human capital of parents, and teachers have been shown to have an influence on academic achievement (Marks, Cresswell, & Ainley, 2006; Parcel & Dufur, 2001), and the social capital of individuals, families, and schools have all been found to be related to academic achievement (Stewart, 2008; Polluck, 2004; Yan & Lin, 2005).

This research has shown that the capital of parents, teachers, and schools all factor into academic achievement in varying degrees. With this interest in other forms of capital, and the lack of research on psychological capital within educational organizations it seems like a fruitful line of research to continue the PsyCap research into the educational organizations. Furthermore, preliminary studies show that PsyCap can increase academic performance. In testing the reliability and validity of their new PsyCap measurement Luthans and associates used a sample of 167 management students in a university setting. They found that students with an increased level of PsyCap had higher grade point averages (Luthans, Avolio, Avey, & Norman, 2007). As a result, of this exploratory study it seems plausible that PsyCap can contribute to performance impact within the educational organization as it has been shown to in other types of work settings.
Financial, human, social, and psychological capital can predict both macro and micro academic performance of students, teachers, and schools.

Psychological Capital and Educational Performance

Research is beginning to suggest that psychological capital has both a micro and macro effect on organizations. For example, researchers have found that psychological capital will lead to increased individual performance and satisfaction (Luthans, Avolio, Avey, & Norman, 2007). Research is also beginning to suggest that psychological capital can have both direct and indirect macro effects on organizations (Avey, Luthans, & Youssef, in press; Avey, Wernsing, & Luthans, 2008; Luthans, Norman, Avolio, & Avey, 2008). Educational research suggests that the traditional forms of capital (i.e., financial capital, social capital, and human capital) play a role in academic performance of students, teachers, and schools (Lassen, Steele, & Sailor, 2006; Parcel & Dufur, 2001; Marks, Cressewell, & Ainley, 2006; Stewart, 2008). These lines of research also suggest that these forms of capital have both micro and macro effects on academic performance. Thus it seems plausible that psychological capital will also be able to influence both macro and micro outcomes for increased academic performance.

Proposition 1: An increase in the psychological capital of teachers and students will have both macro and micro effects on performance impact within educational organizations.

Educational researchers have also found that the capital of multiple sources play a role in academic achievement. For example, the financial, human and social capitals of schools and families interact to varying levels and degrees. Parcel and Dufur (2001) stated that “capital at home and at school can work together for good or for ill” (p. 902). Thus, it seems plausible that the psychological capital of students and the psychological capital of teachers will both play a role in academic performance.

Proposition 2: The psychological capital of both teachers and students will play a role in the academic performance of teachers and students.

In educational organizations the majority of employees are teachers. The research on psychological capital doesn’t seem to suggest psychological capital is only applicable to limit business organizations, rather research seems to be suggesting that psychological capital can be applicable to employees in a wide variety of work and organizational settings. PsyCap has been shown increase employee performance, satisfaction and commitment in a variety of working adults (Luthans, Avolio, Avey, & Norman, 2007; Luthans, Norman, Avolio, & Avey, 2008; Luthans, Youssef, & Avolio, 2007). As a result, it is plausible that increasing teacher’s psychological capital will have a performance impact by increasing the teacher’s ability to perform at a greater level in their job, lead to greater commitment and greater work satisfaction.
This increase in performance impact will also be seen in an increase in satisfaction from students, and an increase in academic achievement in students.

As shown in the psychological capital research in business organizations psychological capital has led to greater performance. As a result it seems possible that higher psychological capital in teachers will lead to better job performance, and in this setting greater job performance is equated with higher academic achievement of their students.

Proposition 3: An increase in the psychological capital of teachers will result in an increase in the teacher’s work performance, commitment, and satisfaction.

Proposition 4: An increase in the psychological capital of teachers will also result in increased satisfaction of the students, and increased academic achievement of the students.

Educational organizations are also concerned with the positive personal development of students. This has led researchers to look at such positive variables as hope, optimism, resiliency, and self-efficacy. There is accumulating evidence of the impact of increasing students’ positive development on academic achievement. Consequently, with the newly emerging construct psychological capital it is possible that by developing students’ psychological capital it will lead to performance impact through increased satisfaction of the students, and increased academic achievement through high grades, greater transfer of knowledge, and higher federal and state tests. Also, positive organizational behavior variables of hope, optimism, self-efficacy, and resiliency have all been linked to an increase in academic achievement of students in a variety of settings (i.e., elementary schools, middle schools, high schools, and university settings) it is possible that students with higher psychological capital will lead to higher academic achievement.

Proposition 5: An increase in the psychological capital of students will lead to greater academic achievement, satisfaction, and commitment.

Proposition 6: Students with higher psychological capital will be positively related with higher grade point averages, greater transfer of knowledge, and higher scores on Federal and State examinations.

Proposition 7: Students psychological capital will explain additional variance separate from student’s financial capital, human capital, and social capital in explaining academic achievement.
Psychological capital has been shown that it can be developed in individuals in a relatively short amount of time (Luthans, Avey, Avolio, Norman, & Combs, 2006; Luthans, Avey, & Patera, 2008). This gives educational organizations the possibility of developing the psychological capital of their employees in relatively short professional development meetings. In a similar fashion, psychological capital can be developed in students by integrating psychological capital into the curriculum. For example, Snyder (1994, 1995) has suggested that students hope can be best developed not as a separate curriculum item, but as a part of the greater academic curriculum. Hope was best developed in small insertions of hope development into the daily curriculum. In a similar manner, it is proposed that psychological capital will be best developed as part of the greater academic curriculum.

Proposition 8: Psychological capital can be developed in short one hour professional development meetings for teachers.

Proposition 9: Psychological capital will be best developed as an integrated part of the large academic curriculum.

Proposition 10: Psychological capital will be able to be developed in elementary students, middle schools students, high school students, and college students.

The psychological capital of the student and teacher will also interact with each other. A teacher with a high level of psychological capital will be better able to handle and strengthen a student who has a low level of psychological capital. A student with an extremely low level of psychological capital will hinder the performance impact that the development of the teacher’s psychological capital could have on performance. Also, in contrast a teacher with a low level of psychological capital may hinder the performance impact of a student with a high level of psychological capital in the short run, but ultimately the student with a high level of psychological capital will succeed academically.
Figure 3. Framework linking psychological capital to macro and micro performance impact in educational organizations.

Proposition 11: A teacher with a high level of psychological capital will be better suited to strengthen and develop the psychological capital of their students.

Proposition 12: A student with an extremely low level of psychological capital will hinder the performance impact that the development of the teacher’s psychological capital could have in performance.

Proposition 13: Teachers with a low level of psychological capital will struggle in developing the psychological capital of their students.

Proposition 14: Students with a high level of psychological capital will continue to succeed regardless of the level of psychological capital of the teacher.

Summary
Positive organizational behavior (POB) (Luthans, 2002a, 2002b) is receiving considerable attention in business organizations. This has led to researchers to discovering the
valuable effects that positive psychology variables can have in the work setting on job performance. The study of hope, optimism, self-efficacy, and resiliency has led researchers to a higher order construct known as psychological capital (PsyCap) (Luthans, Youssef, & Avolio, 2007). This is a form of capital that is concerned with who individual are and who they are becoming. PsyCap is currently being researched and has been found to lead to increased performance, satisfaction, and commitment. In addition, psychological capital can be developed in relatively short training periods. However, researchers have not considered psychological capital in the educational organizations. Educational researchers have traditional been interested in looking at different forms of capital such as financial, human, and social capital and their impact on academic performance. Researchers have found that all three forms of capital contribute to academic performance. As a result, it seems plausible that psychological capital may need to be considered as an additional form of capital, which will further explain performance within the educational organization. This paper proposed a frame work that suggests that the psychological capital of teachers and students interact to facilitate academic performance within educational organizations. It is suggested that an increase in PsyCap of teachers will increase their individual performance, satisfaction and commitment. Also, an increase in students’ psychological capital will influence their academic achievement, similarly to that of other forms of capital. It is anticipated that this model will begin to help researchers understand the possible benefits of increasing teacher and students’ psychological capital. Research is showing that psychological development can be developed in short interventions, and this paper suggests it may be best to incorporate the development of psychological capital within the already existing curriculum, which has been shown to be successful with other positive psychological variables such as hope.

Discussion

The most substantial contribution of this paper is to begin to suggest the need to develop psychological capital within our educational organizations. Educational organizations have typically been concerned with the financial capital, human capital, and social capital of students, families, and schools, because of the implications on academic achievement. This paper suggests that educational organizations should begin to facilitate and consider the development of students and teachers psychological capital. It is proposed that this development of psychological capital will have both positive micro, and macro effects on students, teachers, and schools.

This paper also extends the research of psychological capital into the educational organization. Thus, far psychological capital seems promising in its ability to have a performance impact on organizations. As a result it is plausible that it will continue to have a positive correlation with performance in educational organizations.

This paper has also furthered the research on the developmental aspect of psychological capital by suggesting that psychological capital can be developed in children, adolescents, and young adults. In fact, a look at these developing individuals may show the greatest potential and
ability to develop psychological capital. In addition, this model suggests that psychological capital can be developed as part of, and embedded within an educational curriculum. This will allow educators to not be burden with one more thing to teach. Rather, the psychological capital development will be part of the larger curriculum, but will lead to substantial gains in academic performance. Furthermore, psychological capital has been shown to have an upwards of a 270% return on investment (Luthans, Youssef, & Avolio, 2007). This return on investment would greatly improve educational organizations effectiveness, and be a way to quantifying the effectiveness of training and workshops that teachers participate in.

Research studies are needed to test this framework. Psychological capital has a 24 item questionnaire that will help facilitate this process (Luthans, Avolio, Avey, & Norman, 2007). This assessment can be given to both students and teachers to see their impact on academic performance. In addition, objective criteria such as federal and state achievement tests can give vital performance data. Researchers will need to look at multi-level analysis to completely understand the effects on students, teachers, and schools.

Further research is also needed to look at the effects of the parents’ psychological capital on the academic achievement of their children. Parental financial, human, and social capital have all be shown to have an impact on their children’s academic achievement, so it seems possible that parents psychological capital will also have an impact on their children’s academic achievement. Also, research needs to look at the psychological capital of school and district administrators, and the possible effects on students and teachers. Furthermore, researchers need to consider the practicality of developing psychological capital within an educational curriculum. Finally, researchers need to explore the possibilities of developing psychological capital in children, adolescents, and young adults, and the best strategies and training methods. Are certain activities, procedures, strategies better at developing psychological capital than others? Is there a difference in effectiveness of the strategies according to age? These and other curriculum questions will need to be further explored.

Conclusion

Psychological capital is a new and emerging positive psychology variable that has been shown to increase performance within business organizations. Thus, it seems possible that it may also increase performance within educational organizations. Typically, educational organizations have been concerned with the more traditional forms of capital (i.e., financial, human, and social capital), and this paper suggests the applicability and importance of considering a fourth form of capital—psychological capital. It is suggested that an increase in the psychological capital of teachers and students will lead to greater academic performance, satisfaction, and commitment. In addition, it is also suggested that psychological capital can be developed as part of the existing curriculum.
References


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Defining Talent Management for Sustainability: A Focus for Today and Tomorrow
Susan Sweem, University of St. Francis, susansweem@aol.com

ABSTRACT
Talent management has many definitions in the business literature. This paper takes a holistic approach in that talent management is a strategic component of the overall organizational strategy. Its historical emergence is explored and it is defined based upon the talent management drivers identified in this study which include a continuous work environment improvement, open climate and consistent communication. These drivers become the core building blocks for an overall talent management strategy that includes culture, managing performance, workforce planning, career development and fluid business drivers. Embedded within the organizational strategy, a holistic talent management approach promotes a competitive edge for future sustainability for companies that continuously address talent issues. Talent management is not a one-time initiative but rather exists to support the overall organizational goals and strategy.

INTRODUCTION
Most organizations have a mission or vision statement that asserts their most valuable resource is their people. They believe it is the employees that are the key drivers of success. If this were true, many organizations would be placing a large emphasis on the recruitment, development and engagement of the best people to maintain a competitive edge. However, this is not happening as many organizations are actually underperforming and are not engaging their employees (Debunking the Myths of Employee Engagement, 2006; Employee Engagement Report 2006, 2006; Gebauer, 2006).

This should be a major concern for companies. “When it comes to talent, the complacency is rampant in too many companies” (Gandossy & Kao, 2004, p. 15). Economic conditions have certainly contributed to this tide but it appears to be a trend that was pervasive even before the most recent downturn at the end of 2008. Peter Cappelli (2008), professor of management at the University of Pennsylvania’s Wharton School of Business, purports that executives are still concerned with attracting and retaining the right people but they haven’t been spending much time toward the issue. “The good news is that most companies are facing the challenge with a pretty clean slate: Little in the way of talent management is actually going on in them” (Cappelli, 2008, p. 76). However, with little on the slate, organizations are open to new strategies of talent management. The bad news is that many organizations are addressing talent management with similar methods that they have been employing for the past thirty or forty years. If organizations want to be sustainable and improve their effectiveness, they are going to have to address talent management quickly. The question, however, remains how to do this even during difficult economic conditions.
Talent management should not be owned by one function or person in any organization. However, it is the combination of human resources (HR) and organization development (OD) strategies that contribute together toward the overall organizational goal of creating and sustaining an effective and high performing company. By infusing organizational strategy with a human capital perspective, companies can create the appropriate change environment to increase firm performance and, ultimately, profits (Worley, Hitchin, & Ross, 1996).

To contribute to the organizational strategy, a human capital strategy or talent management approach must be defined and created. What is talent management? Is it another attempt to just rename old strategies or is it another approach that will clearly differentiate the good from great companies? What are the critical talent management dimensions? These questions are vital to any organization that understands its future sustainability relies on its talent and human capital capabilities.

**HISTORICAL PERSPECTIVE OF TALENT MANAGEMENT**

It is no secret that organizations from all eras of the past have had a common goal: To produce the highest level of output possible in the most efficient timeframe toward increased profitability. This was true when the US was predominantly an agricultural society but was even more pronounced with the advent of the industrial revolution. Frederick Taylor capitalized on this movement creating a scientific methodology for processing and producing products efficiently. This methodology was termed “Taylorism” after Taylor who created the precursor to industrial engineering and time studies (Cummings & Worley, 2005). Following the early theory of Taylor, the Hawthorne experiments were conducted in the early 1920’s. The researchers discovered a humanistic and psychological approach to labor (Burke, 2002). Efficiency alone was not the answer to a productive workplace but rather it was the amount of attention that was being exhibited toward a group that contributed to the effectiveness. The performance of the individual or group was now being considered as part of the productivity equation.

The humanistic and behavioral approaches were further developed in the 1950s. Internal development became the norm along with clear succession planning for white collar workers. Schein (1978) developed the concept of career anchors during the 1970s. Career anchors evolve over time in one’s personal and occupational experiences. The concept emphasizes the interaction between abilities, motives and values into a person’s “self-concept.” It is the “real self.” It was very evident where individuals stood with respect to their career anchors. However, internal talent development programs collapsed in the 1970s “because it could not address the increasing uncertainties of the marketplace” (Cappelli, 2008, p. 76). The
assumptions that organizations had followed the prior two decades were no longer valid yet they continued to utilize outdated methods to turn out middle management. Schein (1996) also found that people had to adjust to the turbulent environment in the 1980s and three new anchors emerged. He found individuals had to be more self-reliant with rapid technological and economical changes. They also wanted to provide a greater contribution to the greater good and that managerial skills were becoming more of a standard for most jobs. Individual development and succession planning were being transformed and refined for the future.

With the recession of the 1980s, middle management layers were cut which eliminated many talent development practices with respect to succession planning. Schein (1996) did advocate that employee development would become a process rather than an initial selection based on an individual’s history. But has this truly surfaced even ten years later?

During the economic boom of the 1990s, employers could hire from a large pool of talent. Again, talent management was not at the forefront of every organization since supply was abundant. However, at the turn of the 21st century, talent management became a priority for many organizations. Talent management transpired as an area of focus when companies had to leverage their position for economic reasons during 2001 and 2002 (Galagan, 2008). Who had the talent ready for their company to move forward?

TALENT MANAGEMENT IN THE 21st CENTURY

The term talent management emerged in the late 1990s and was popularized by a study completed by researchers from McKinsey & Company. The study revealed that it was not “best” practice that distinguishes high performing companies, but was a pervasive talent management mindset (Michaels, Handfield-Jones, & Axelrod, 2001). The competitive advantage for organizations comes from having superior talent and managing it appropriately. Michaels, Handfield-Jones and Axelrod (2001) found that on average companies that did a better job of attracting, developing and retaining talented employees earned twenty-two percentage points higher return to shareholders. This caught the eye of many CEOs as potential for organizational improvement and increased productivity.

As a result, managing talent is now a key concern for most HR/OD professionals (Garrow & Hirsch, 2008). In fact, it has become a strategic imperative for many organizations (Ashton & Morton, 2005). The path for talent management is about embracing and leveraging connectedness (Frank & Taylor, 2004). Talent management is actually part of the overall strategy for companies and corporations now appear ready to embrace this concept (Oakes, 2006). But what is talent management?
Talent Management Defined

“There is no clear, shared definition of talent management” (Garrow & Hirsch, 2008). There are numerous articles and literature directed towards the field of talent management but there is a lack of clarity regarding the definition, scope and goals (Lewis & Heckman, 2006). Attempts to define talent management get complex when organizations embrace the concept in different ways (Galagan, 2008). However, Lewis and Heckman (2006) conducted a review of the literature and concluded that there were several distinct streams of definitions and various degrees to which organizations have utilized them.

The first definition simply replaces the term human resources with talent management (Cohn, Khurana, & Reeves, 2005; Conger & Fulmer, 2003; Garger, 1999; Garrow & Hirsch, 2008). It encompasses the human resource functions and practices including recruitment, selection, development and succession planning (Byham, 2001; Heinen & O'Neill, 2004; Olsen, 2000). In this context, talent management is a new name for human resources similar to when personnel changed to HR.

A second stream of definition considers talent management as the internal pool of resources as it focused on human resource and succession planning (Cheloha & Swain, 2005). It is having the right people at the right time in the right place (Kesler, 2002). Many organizations consider talent management as a recruitment tool that utilizes technology to assist in the process of identifying the proper talent.

Adding the dimension of managing talent through performance is a third definition. Buckingham and Vosburgh (2001) view it as an undifferentiated good that emerges from humanistic and demographic perceptions. Talent management in this genre is the ability to manage people to their highest potential. It includes the development of employees and managing that process. This does require cooperation and communication among managers at all levels (McCauley & Wakefield, 2006).

Holistic Approach to Talent Management

Each of these definitions hold credibility for their individual streams, but the term talent management should be considered much more strategically if it is going to be a sustaining factor. As Peter Cappelli (2008) states:

Talent management is not an end in itself. It is not about developing employees or creating succession plans, nor is it about achieving specific turnover rates or
any other tactical outcome. It exists to support the organization’s overall objectives, which in business essentially amount to making money (p. 77).

It is a strategic imperative that should be an integral part of the organizational planning (Ashton & Morton, 2005). It is more than renaming a department or recruiting individuals. Ashton and Morton (2005) proclaim that since there is no single definition, talent management must be fluid so it can change as business strategy changes. Sustainable organizations will only survive if talent management is aligned with the business strategy.

This paper proposes a holistic approach to talent management. It is a combination of all of the various attributes together into a model that includes 1) integrating human resources and systems across all departments and levels, 2) involves the cooperation of all levels of managers from the Board of Management to the first line supervisors, 3) is facilitative in nature, 4) aligns talent with the business strategy, 5) is proactive in terms of future growth and sustainability, 6) develops improved processes for developing and managing talent, and, 7) provides connectedness in culture among all employees and managers. Talent management is a holistic concept where all of the dimensions are integrated together to form the base for building an organizational strategy that promotes human resources as the most valuable asset.

**DRIVERS OF TALENT MANAGEMENT**

If organizations are going to incorporate a talent management strategy into the overall organizational strategy for future sustainability, the key drivers of talent management need to be identified. Based upon the holistic definition of talent management, a talent management strategy model is proposed:
This model proposes that communications, employee development, rewards and recognition, managing performance and an open climate are essential elements of a talent management strategy. These dimensions need to be explored from both an individual and organizational perspective to assist in determining if they should be the focus toward a talent management strategy.

**Methodology**

A quantitative approach was pursued to identify the talent management drivers. Employee surveys from a global manufacturing company were utilized to collect the data. The survey was not originally intended to be used for the study of talent management strategy so there should be little response bias on the part of the employees. The survey was originally intended to be used to collect opinions from employees based upon the current organizational climate and structure. This study examines the results for the US business units. There were 52 questions utilizing a Likert-scale response scheme and all responses were confidential. The same
The survey was administered three years in a row. This allowed for longitudinal validation. The first year the survey was distributed to all employees. The second and third years it was distributed to a sample of the population as a “pulse” survey.

Table 1. Survey Response Rate

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Responses Received</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3,340</td>
<td>66%</td>
</tr>
<tr>
<td>2007</td>
<td>1,498</td>
<td>50%</td>
</tr>
<tr>
<td>2008</td>
<td>3,688</td>
<td>60%</td>
</tr>
</tbody>
</table>

There are fluctuations in the sample numbers as the organization made an acquisition in 2008 but, overall, the three years of data is roughly equivalent in terms of representing the population.

The data from these surveys was statistically analyzed to determine if any of the proposed talent management dimensions were valid. Factor analysis was utilized as it helps a researcher discover and identify the dimensions behind many measures (Kerlinger & Lee, 2000). It is a powerful method of construct validation (Kerlinger & Lee, 2000).

Results

The variables chosen for the factor analysis were based upon the model constructed and correlated questions from the employee survey (see appendix A). Three factors emerged through the process to characterize the talent management construct. These three factors identified were: 1) continuous work environment improvement, 2) open climate, and 3) communication and clear top management direction. Continuous work environment improvement involves striving to improve working conditions. It is the recognition of efforts to improve quality and processes within departments as well having the capability to learn from mistakes rather than be punished for them. An open climate allows individuals to challenge status-quo and adopt ideas from others. Clear top management direction is vital if the employees are going to know the direction of the company goals and the only way to accomplish this is through communication. Together, these three factors explain 70.55% of the variance with continuous work environment improvement accounting for 48.25% of this variance. Table 2 below displays the talent management construct and the three component factors with their corresponding factor loadings.

Table 2. Talent Management Construct
**Rotated Component Matrix**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q28 In dept. we work to improve working conditions</td>
<td>.823</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q30 In dept. we recognize efforts to improve quality</td>
<td>.786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q29 In dept. we learn from mistakes</td>
<td>.780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q39 Have adopted ideas from people outside dept.</td>
<td>.804</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q37 In dept. people can challenge the way of doing things</td>
<td>.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q38 In dept. we value diversity in employees</td>
<td>.744</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q35 Senior Mgmt give employees a clear picture of the company direction</td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25 Clear link between performance and pay</td>
<td>.761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q40 My BU keeps employees informed about matters affecting us</td>
<td>.738</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis  
Rotation Method: Equamax with Kaiser Normalization

a. Rotation converged in 6 iterations.

Chronbach’s alphas were calculated for each talent management component to authenticate the statistical validity of the factor analysis results. It measures how well the set of survey questions measures the identified component. A Chronbach’s alpha of 0.7 or greater purports a high reliability that the questions grouped together are all measuring the same component. Table 3 lists the results for the talent management construct.

**Table 3. Cronbach’s Alpha for the Talent Management Construct**

<table>
<thead>
<tr>
<th>Talent Management Construct</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Work Environment Improvement</td>
<td>0.81</td>
</tr>
<tr>
<td>Open Climate</td>
<td>0.79</td>
</tr>
</tbody>
</table>

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Based upon these results, the model is valid with respect to key talent management drivers. Communication and an open climate are distinctly identified as key components of a talent management strategy model. Continuous improvement within the work environment is another key component which encompasses the employee development and managing performance dimensions. The rewards and recognition factor emerged in the communications arena rather than as its own distinct factor. Employees want to ensure that they are receiving what they feel they deserve and managers are informing employees what they are worth to the organization. A revised model to incorporate the findings and further imbed talent management into the overall organizational strategy is displayed below in Figure 2.

A holistic definition of talent management is inherently complex but is promising from a conceptual construct. Finding and developing resources in an organization that will generate sustainable organizational knowledge is vital (Barney, 1991). It is also about choosing human capital resources wisely based upon informed data (Boudreau & Ramstad, 2005). In addition, the organization must provide an appropriate culture for learning in order to sustain future success (Lado & Wilson, 1994; E. H. Schein, 1990). It is the human capital component that will implement and carry-out the organizational strategy (Lawler & Worley, 2006).

Limitations

There are recognized limitations with the study. The results of the quantitative analysis are from one organization. These results should be further validated with survey data from other organizations and industries. As generalizations are difficult to make from only one organization, it does, however, offer insights for consideration and future research development.

TALENT MANAGEMENT – BOOM OR BUST?

The drivers of talent management all work together in concert toward building organizational success. Talent management is not just about placing people in the right job at the right time. It also involves human resources and succession planning as well as managing performance. Career development is vital as is creating an appropriate environment to cultivate the right culture. But most importantly, it is the strategic impact of talent management that must be incorporated. Figure 3 presents talent management strategy defined through theory and practice.
Talent management must be fluid as described by Ashton and Morton (2005) so that as the organizational strategy changes so can the talent management strategy. However, the basic premise of HR/OD should be to support the values of human potential, participation and development toward a competitive edge (Cummings & Worley, 2005). These are innately embedded into the strategy and should be cognizantly recognized. This is not to say that all of the parts individually are not important; they are important as they all fit together in the strategy. But, it is the holistic approach that makes talent management flexible and adaptable which is necessary in today’s corporate environment to remain competitive.

Companies need to ensure that they are addressing talent management on a consistent basis regardless of the economic situation. Today’s business environment is different than even a couple of years ago. Companies are being faced with pressure to deliver results, build revenue and cuts costs while at the same time growing the business for the future (Gandossy & Kao, 2004). In order to accomplish these goals, organizations will have to ensure the proper human capital initiatives are in place and with the ever-changing environment, it must be adaptable.
is through a talent management strategy that this can be accomplished. It is not a one-time initiative nor is it a program sponsored by HR/OD. Rather, it is ingrained in the organizational goals and strategy. Therefore, in times of economic boom or gloom, organizations need to stay the course with their talent management strategy. Budgets may be cut for training during hard times, but the development of employees can still be addressed through cross-training or in-house courses. Performance and career development does not stop or pause for an economic downturn. Top performers will always be in demand and can easily change organizations if their talent is not recognized. Even average performers will consider leaving an organization once the

Figure 3. Talent Management Defined Through Theory and Practice
economy picks up if they are not treated appropriately. So what can an organization do to address this?

The culture of an organization must poignantly emphasize the importance of talent management on a continuous and consistent basis. Employees want to belong to a company where open and honest communication exists and feedback is constant. Organizations must strive for continuous work environment improvement through employees, supervisors, leaders and the work itself. Employees should have the capability to learn from mistakes rather than be punished for them. They can challenge the status-quo and adopt new ideas. This can only exist if the communication lines are open and flow two ways in a continuous loop.

Globalization has also increased the need for a talent management strategy. Competition is no longer only at a national level; work and human capital are now competing on a global basis. This trend began occurring several decades ago when jobs were shipped to developing countries but the difference is that today, the level of complexity in the jobs overseas had increased tremendously (Gandossy & Kao, 2004). Organizations that address talent management on a global basis and view it as an integral part of the business plan will drive the business forward. As Peter Drucker (1998) predicted more than ten years ago, “The dominant factor for business in the next two decades – absent war, pestilence, or collision with a comet – is not going to be economics or technology. It will be demographics” (p. 16). It is the human capital factor. Top organizations are preparing their people for the challenges ahead through a talent management strategy, but there are still plenty of companies that have chosen to ignore talent management. A study by McKinsey found that 54% of senior managers say they don’t spend enough time on talent management ("Talent management barriers," 2007). To sustain future business, organizations must address talent management now.

Talent management is a holistic strategy which must be consistently addressed. It can be the competitive edge for organizations who truly do value their number on asset: people. The economic times should not influence whether or not talent management is addressed but rather how it is addressed. Talent management can boom during difficult times and should never bust with a recession. Now is the time to ensure a talent management strategy with the appropriate talent drivers is in place and aligned with organizational goals for future sustainability.

REFERENCES


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**APPENDIX: TALENT MANAGEMENT DIMENSION SURVEY QUESTIONS**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Communication</td>
<td>1. My immediate supervisor is open &amp; honest with me.</td>
<td>2. Senior management of CoatCo world-wide provides a clear picture of the direction the company is headed.</td>
</tr>
<tr>
<td></td>
<td>31. I understand the goals of my department.</td>
<td>3. Senior management of CSU provides a clear picture of the direction the company is headed.</td>
</tr>
<tr>
<td></td>
<td>32. I understand how my personal objectives</td>
<td></td>
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338
<p>| | |</p>
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<tr>
<th></th>
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<tbody>
<tr>
<td>support my department’s goals.</td>
<td>picture of the direction the company is headed.</td>
</tr>
<tr>
<td>35. Senior management gives employees a clear picture of the direction the company is headed.</td>
<td>15. Management of CoatCo world-side keeps employees informed about matters affecting us.</td>
</tr>
<tr>
<td>40. My Service Unit keeps employees informed about matters affecting us.</td>
<td>16. Management of CSU keeps employees informed about matters affecting us.</td>
</tr>
<tr>
<td>60. I have attended a feedback meeting with our department on the 2006 Employee Survey (from the 2008 pulse survey)</td>
<td>17. My manager keeps me informed about matters affecting me.</td>
</tr>
<tr>
<td>61. We are following an action plan from the 2006 Employee Survey (from the 2008 pulse survey)</td>
<td></td>
</tr>
<tr>
<td>Employee Development</td>
<td>Rewards and Recognition</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>10. My immediate supervisor discusses future opportunities with me.</td>
<td>5. Within my department generating new ideas is encouraged and recognized.</td>
</tr>
<tr>
<td>11. My immediate supervisor delegates responsibility to me.</td>
<td>8. Appropriate rewards and recognition are provided for my performance.</td>
</tr>
<tr>
<td>12. My immediate supervisor discusses my future career with me.</td>
<td></td>
</tr>
<tr>
<td>13. I have opportunities for further development within my current job.</td>
<td></td>
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<tr>
<td>14. I see clear opportunities for my next job.</td>
<td></td>
</tr>
<tr>
<td>15. My own organization offers the support and resources I need for my development.</td>
<td></td>
</tr>
<tr>
<td>16. I am encouraged to be innovative in my job.</td>
<td></td>
</tr>
<tr>
<td>17. Within my department, we search for new ways to work and do business.</td>
<td></td>
</tr>
<tr>
<td>18. Within my department new ideas are effectively implemented.</td>
<td></td>
</tr>
<tr>
<td>19. Within my department generating new ideas is recognized.</td>
<td></td>
</tr>
<tr>
<td>42. I have shared my personal objectives with my colleagues.</td>
<td></td>
</tr>
<tr>
<td>10. My immediate supervisor discusses future opportunities with me.</td>
<td></td>
</tr>
<tr>
<td>11. My immediate supervisor delegates responsibility to me.</td>
<td></td>
</tr>
<tr>
<td>12. I have opportunities for further development in my job.</td>
<td></td>
</tr>
<tr>
<td>13. I see opportunities for my next job.</td>
<td></td>
</tr>
<tr>
<td>14. CSU offers the support and resources I need for development.</td>
<td></td>
</tr>
<tr>
<td>30. Within my department we recognize efforts to improve quality.</td>
<td></td>
</tr>
<tr>
<td>33. My department produces results that exceed expectations.</td>
<td></td>
</tr>
</tbody>
</table>
### Managing Performance

21. My immediate supervisor sets ambitious objectives for my dept.
22. My immediate supervisor clearly explains how my performance is evaluated.
23. My immediate supervisor gives me regular feedback on my performance.
24. My immediate supervisor is good coach for me.
25. There is a clear link between my performance and pay.
26. My immediate supervisor encourages teamwork.

### Open Climate

28. Within my department we continually work to improve working conditions.
29. Within my department we learn from our mistakes.
30. My department acts with great urgency where change is required.
31. My immediate supervisor asks for opinions and suggestions from employees.
32. Within my department people can challenge the present way of doing things.
33. Within my department we value diversity in our employees.
34. We have adopted ideas from people outside my department.
35. Within my department we look proactively for opportunities to cooperate with others.
UNLEASHING EMPLOYEE ENGAGEMENT: AN IMPLICIT THEORIES PERSPECTIVE

Peter A. Heslin, Southern Methodist University, PHeSlin@mail.cox.smu.edu
Vitaliy V. Skripkin, Southern Methodist University

ABSTRACT

Engaged employees work vigorously, feeling dedicated and absorbed in their work. Much is known about the kinds of jobs and work environments that stimulate employee engagement. To complement this literature, we propose that employees’ implicit theories of ability can influence their engagement via five mechanisms; specifically, employees’ zeal for development, view of effort, vigilance, interpretation of setbacks, and interpersonal interactions. We outline organizational, managerial, and individual-level factors that can affect employees’ implicit theories, before providing a range of concrete suggestions for cultivating the type of incremental implicit theory that can foster employee engagement.

Keywords: Employee engagement, implicit theories, cultures of genius.

* Heslin, P. A., & Skripkin, V. V. (2010, March). Unleashing employee engagement: An implicit theories perspective. In S. L. Sweem (Chair), Human resources and human behavior. Symposium conducted at the annual meeting of the Southwest Academy of Management, Dallas, TX.

(No) company, small or large, can win over the long run without energized employees … That is why you need to (be concerned with) levels of employee engagement.

- Welch & Welch (2006, p.126)

Engaged employees are widely perceived as being a key ingredient for having a productive workforce (Erikson, 2005). Engagement is a fulfilling cognitive-affective state characterized by vigor, dedication, and absorption (Schaufeli, Salanova, Gonzáles-Romá, & Bakker, 2002). When employees are engaged, they harness themselves to their work by investing themselves physically, cognitively and emotionally in work role performances (Kahn, 1990). High self-efficacy, energy and task focus are undistracted by insecurity, anxiety or self-consciousness (Kahn, 1990; Xanthopoulou et al., 2008). Time flies by for those absorbed in what they are doing (Salanova, Gonzáles-Romá, & Bakker, 2006). Work performed in a way that expresses deeply held values allows individuals to feel connected to their work and to other people (Kahn, 1990; Wrzesniewski & Dutton, 2001). Resulting motivation, proactivity, and empathy – manifest through both in-role and extra-role performance (Kahn, 1992; Salanova &
Schaufeli, 2008; Xanthopoulou et al., 2008) – can yield improvements in profits, sales, customer ratings, accidents, and turnover (Harter, Schmidt, & Hayes, 2002; Salanova et al., 2005).

Disengaged employees just go through the motions. Uninspired role performances result from individuals withholding their full effort, attention, and emotional investment in their work. Distractions reduce mental and behavioral focus. By acting in a perfunctory manner, people’s true identities, thoughts, and feelings are not manifest in their work. Emotional connections with others (e.g., customers, clients, colleagues, etc) are diluted or severed in the process (Kahn, 1990).

Following Kahn’s (1990) seminal work on the nature and behavioral implications of engagement, a substantial literature has evolved regarding contextual factors that foster engagement. To complement this literature, we outline how employees’ engagement also depends upon their implicit theories about the extent to which their abilities are malleable (Dweck, 1999; 2006). We begin by discussing the nature of employee engagement, before outlining the nature of implicit theories. Next we discuss how employees’ implicit theories can affect whether they approach their work with energy and focus that signifies engagement, or with the ambivalence, anxiety, and risk avoidance that are hallmarks of disengagement (Kahn, 1990). Then we review how implicit theories can influence managerial behaviors. We conclude by responding to the call by leading human resource management scholars (e.g., Latham, 2007; Rousseau, 2007; Rynes, Giluk, & Brown, 2007) for concrete statements about precisely how basic research findings might be applied within the workplace. Specifically, we show how organizations, managers, and employees can foster the types of implicit theories likely to either facilitate or undermine employee engagement.

EMPLOYEE ENGAGEMENT

Grounded theorizing by Kahn (1990) revealed that moments of personal engagement stem from work contexts viewed as meaningful and psychologically safe, as well as those that foster psychological availability (see also May, Gilson, & Harter, 2004). Meaningfulness is experienced when people feel worthwhile, useful, and valuable. Such feelings result from jobs involving challenge, variety, creativity and autonomy, work roles that provide people with attractive identities and status, as we as interpersonal interactions that promote dignity, self-appreciation, and a sense of making a positive difference (Kahn, 1990; Grant, 2007).

Psychological safety is marked by people sensing that they can express and employ themselves without fear of negative consequences to their self-image, status or career (Kahn, 1990).

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1 Implicit theories can pertain to different domains such as intelligence, personality, or the “type-of-person” someone is (Dweck, 1999), though most of the implicit theories discussed in this paper pertain to implicit theories of ability.
Psychological safety results from trusting relationships (especially with superiors), well-defined roles and expectations that clarify the bounds for safely expressing themselves, and sensing that failed initiatives are more likely to be occasions for learning than strife. In lieu of such protective boundaries, people can feel unsafe and thus guard themselves by withdrawing rather than whole-heartedly investing themselves in their work (Kahn, 1990).

Psychological availability is the sense of having the physical, emotional, or psychological resources to personally engage during a particular moment. Psychological availability can be depleted by physical stressors (e.g., long hours concentrating and staring at a computer), exhaustion stemming from emotional labor (Hochschild, 1983), job insecurity, self-consciousness, and ambivalence about one’s fit with one’s organization and its purposes (Kahn, 1990).

Subsequent research has revealed numerous other contextual factors that also cultivate employee engagement. These include having had adequate restorative non-work recovery (i.e., rest; Sonnentag, 2003), freedom from sexual harassment (Cogin & Fish, 2009), and having a manager who is engaged (Carmeli & Gittell, 2009; Welbourne, 2007) and appreciative (Avolio et al., 2004). Engagement is also fostered by jobs that provide optimal levels of learning and feedback (Saks, 2006; Schaufeli, Bakker, & Van Rhenen 2009), work associated with one’s calling (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997), organizational support (Saks, 2006), and a work environment in which employees are consulted, appreciated, and have a best friend (Harter, 2008). Given such facilitative conditions, why are some employees still inclined to be more engaged than others?

We propose that implicit theories influence employee engagement via the role of implicit theories in employees’ zeal for development, view of effort, vigilance, interpretation of setbacks, and interpersonal interactions. Next we outline the nature of implicit theories, before explaining the relationships illustrated in Figure 1.

IMPLICIT THEORIES

Implicit theories embody the assumptions people hold about the plasticity of their abilities. An entity implicit theory reflects the assumption that human attributes are essentially fixed, as revealed by agreement with statements such as: You have a certain amount of ability and really can’t do much to change it. An incremental implicit theory reflects the alternate assumption that abilities are pliable and thus amenable to being cultivated, as signified by agreement with statements including: You can always greatly develop your abilities. An entity implicit theory is embodied in the popular view of IQ as largely constant across an individual’s
FIGURE 1
Antecedents of Implicit Theories and Mechanisms Linking Them to Employee Engagement

There are several noteworthy characteristics of implicit theories. First, although people’s implicit theories exist somewhere along a continuum, most individuals tend to gravitate towards holding primarily an entity or an incremental implicit theory. Second, each implicit theory occurs with roughly equal frequency within most populations. Third, neither implicit theory is predicted by a person’s ability level, personality, education, or cognitive complexity (Dweck, 1999, 2006). Finally, Dweck, Chiu, and Hong (1995, p.279) conceptualized implicit theories as “relatively stable but malleable personal qualities, rather than as fixed dispositions.” Although chronic implicit theories are fairly consistent over at least three years (Robins & Pals, 2002), they can also be situationally-primed (Nussbaum & Dweck, 2008; Wood & Bandura, 1989), and cultivated more permanently by compelling messages (e.g., Aronson, Fried & Good, 2002; Heslin, Latham & VandeWalle, 2005), as discussed later. Both the incremental and the entity implicit theories are thus accessible to most people (Dweck, 1999). Later we show how each is amenable to being influenced by organizational culture, managerial actions, and employees’ achievement-related cognitions (see Figure 1). Next we consider how implicit theories cue the types of thoughts, feelings, and actions associated with engagement.
EMPLOYEES’ IMPLICIT THEORIES AND ENGAGEMENT

Implicit theories might influence employees’ engagement in several ways; specifically, via their zeal for development, view of effort, vigilance, interpretation of setbacks, and interpersonal interactions.

Zeal for Development

When people have an incremental implicit theory, they construe their abilities as improvable through targeted practice and other developmental initiatives (e.g., coaching, reading, or taking a class). An entity implicit theory leads to perceiving novel or challenging tasks as tests of inherent abilities. The risk that such “tests” might diagnose unalterable ability deficiencies can cause those with an entity implicit theory to disengage and avoid potentially enlightening challenges (Dweck, 1999).

Based on English proficiency scores, Hong et al. (1999) identified students entering the University of Hong Kong (where English proficiency is a necessity) who could benefit from remedial English classes. After the students’ implicit theories were assessed, they were asked about their willingness to undertake a remedial English class. Among the students with low English proficiency, those with an incremental implicit theory were much more interested in taking such a course than were the students with an entity implicit theory. In fact, to avoid jeopardizing their psychological safety by acknowledging a deficiency and proactively working to remedy it, the students with an entity implicit theory preferred to put their academic careers at risk.

This study illustrates that an entity implicit theory can lead people to avoid engaging in challenging, useful developmental opportunities. Such defensive, self-defeating behavior is explicable in terms of how entity theorists construe the prospect of hard work as a means of developing their capabilities, as considered next.

View of Effort

Is sweat and toil an indispensible ingredient for effective learning and performance, or an indictor of lacking talent? How people respond to this question depends upon their implicit theory. Those with an entity implicit theory believe that high ability is a largely sufficient condition for learning – that if you have ability, you should not need to expend much effort. Hence, having to work hard indicates inaptitude in a particular area. It is thus not surprising that students with an entity implicit theory report that one of their main goals in school is to exert as little effort as possible (Blackwell, et al, 2007).
People who hold an incremental implicit theory generally view high effort as essential to developing virtually any ability. They attribute their disappointing performances to inadequate effort and/or strategies, followed by intensified effort and striving hard to discover ways to perform more effectively (Levy & Dweck, 1998). In contrast, an entity implicit theory is associated with attributing disappointing performance to inadequate ability, exerting less effort going forward, trying to avoid the tasks in which they performed poorly, and even considering deception (e.g., cheating) to inflate future performance ratings (Blackwell, et al, 2007).

Such cynicism about the utility of effort—based on attributing poor performances to fixed abilities, rather than to more malleable factors (i.e., effort and strategies)—could clearly undermine the whole-hearted investment of oneself that characterizes engagement. Entity theorists’ musings about how their apparent performance can be manipulated by cheating will similarly distract their focus away from ascertaining how to master work roles and perform them effectively. The alternative—an incremental implicit theory—thereby facilitates vigorous dedication to the task at hand, as well as the mental focus discussed next. 

Vigilance

Another hallmark of engagement is attentiveness to what is occurring in the present moment (Kahn, 1990, 1992). Vigilance facilitates interpersonal relationships, as well as learning and performance on dynamic tasks. Inadequate vigilance can jeopardize safety, potentially leading to deadly accidents such as the crash of Comair Flight 5191 in August 2007 which killed 49 of the 50 people on board (Saks, 2008). According to the National Transportation Safety Board (2007, p.105), the probable cause of the accident was:

… the flight crewmembers' failure to use available cues and aids to identify the airplane's location on the airport surface during taxi and their failure to cross-check and verify that the airplane was on the correct runway before takeoff. Contributing to the accident were the flight crew's nonpertinent conversations during taxi, which resulted in a loss of positional awareness.

Implicit theories play a key role in vigilance to evolving realities, as shown by data collected at the behavioral (Erdley & Dweck, 1993), attentional (Plaks, Dweck, Stroessner, & Sherman, 2001), and neurological levels (Mangels et al., 2006).

A study by Erdley and Dweck (1993) examined how implicit theories affect the willingness of students to adjust their initial impressions of others. Study participants were shown a narrated slide show of a “new boy at school” performing a variety of transgressions (e.g., trying to steal and cheat). Erdley and Dweck observed that compared to the incremental theorists, the entity theorists were more inclined to predict that the new boy’s behavior would not
change over the coming weeks and months. In addition, when exposed to subsequent information showing that the child was no longer naughty or anti-social, the entity theorists were less willing than the incremental theorists to recognize that the new boy was no longer behaving badly. This study illustrates that entity theorists lack vigilance regarding evidence indicating that they ought to update their initial opinions of other people.

The attention paid to stereotype-consistent vs. inconsistent information, as a function of a person’s implicit theory, was investigated by Plaks et al. (2001). Across four experiments, entity theorists paid more attention to – and showed greater recognition of – stereotype consistent information, while incremental theorists did the opposite. Plaks et al. concluded that entity theorists seek and process information in a way that maintains their stereotypes, while incremental theorists’ greater open-mindedness probably helps them to transcend their stereotypes. This study demonstrates that an incremental implicit theory fosters alertness to other people’s uniqueness that transcends their membership of racial, gender and other categories that are used as the basis for stereotyping.

Mangels et al. (2006) tracked college students’ event-related brain potentials as they worked on a difficult general knowledge task. Shortly after participants had submitted each answer, they were given ability-related feedback stating whether their answer had been right or wrong, followed soon after by learning-relevant feedback explaining the correct answer. The waveforms associated with error detection and correction revealed that participants with an entity implicit theory had significantly less neural activity in the region of the brain associated with the processing of corrective feedback, compared to those with an incremental implicit theory. An entity implicit theory also undermined learning from the corrective feedback, as revealed by the entity theorists’ inferior subsequent retest performance relative to that exhibited by the incremental theorists. This neurological study suggests that incremental theorists’ vigilance to edifying information enables their learning and performance improvement.

In essence all three studies show that an incremental implicit theory facilitates the alertness to new, useful information that characterizes engagement. Such open-minded adaptability is a likely asset in dynamic work roles – such as those involving customer service, healthcare, safety, education or knowledge work – wherein effectiveness depends critically upon recognizing and responding constructively to unexpected developments.

**Interpretation of Setbacks**

Feedback indicating that one’s performance has fallen short of expectations is to be expected in most contemporary work roles (London, 2003). The meaning ascribed to failures and setbacks, such as whether they are perceived to threaten cherished abilities and identities, determines how well people recover, learn, and persist. People with an incremental implicit
theory tend to view setbacks as an inevitable part of the learning process and thus a useful indicator of which strategies work and which do not. This leads to choosing to study the strategies of better performers and undertake challenging tasks on which learning (and also chance of failure) is likely (Nussbaum & Dweck, 2008).

Incremental theorists’ engagement in the face of setbacks is also marked by resolute task focus, vigorous effort, and systematic strategy development. Learning and performance on complex tasks is thereby enhanced (Blackwell, et al, 2007; Tabernero & Wood, 1999; Wood & Bandura, 1989). For example, in the realm of learning to negotiate – where setbacks and frustrations are rife – holding an incremental theory about one’s negotiation ability predicts both negotiating prowess (i.e., value claiming and value creating), as well as performance in both one-shot negotiations and overall learning from a negotiation course (Kray & Haselhuhn, 2007).

From the perspective of an entity implicit theory, failure provides diagnostic information about how little ability a person possesses – and will likely ever possess. Such negative self-judgments lead to self-defeating cognitions, affect, and behaviors, as evidenced by entity theorists’ preference to study the strategies of worse performers and to do unchallenging, uninformative tasks in order to feel better about themselves (Nussbaum & Dweck, 2008). Other dysfunctional manifestations of an entity implicit theory include withdrawal of effort (Hong et al., 1999), willingness to lie about a poor score (Blackwell et al., 2007), worrying about what others will think of them (Cury, Da Fonseca, Zahn, & Elliot, 2008), and not seeking feedback (Heslin & VandeWalle, 2005).

Holding an entity theory triggers not only denial and disengagement, but also a limited zone of comfort for achievement. Plaks and Stecher (2007) theorized that implicit theories create expectations about personal performance trajectories and that people are averse to deviations from these expectations. They conducted an experiment in which students were randomly assigning to be informed that their performance had improved, declined, or remained static over time. Plaks and Stecher observed that the entity theorists took performance decline and improvement worse than did incremental theorists, viewing them as unexpected, difficult to account for, and thus more anxiety-provoking than they were for the incremental theorists.

On the other hand, of the participants assigned to be informed that their performance had not changed, the incremental theorists experienced more anxiety and displayed weaker subsequent effort and performance than the entity theorists (Plaks & Stecher, 2007). For incremental theorists, a failure to improve despite their effort and opportunity to do so represented a direct refutation of their implicit belief in their capacity to change. Thus, only information contrary to participants’ implicit theories tended to produce anxiety and impede task engagement.
Some implications of this study are that in roles where scope for performance variation is limited, entity theorists are likely to be more engaged than incremental theorists. Under the more common circumstances where individuals are able to influence their performance levels, incremental theorists are unlikely to be encumbered by the defensive inclinations that undermine entity theorists’ sustained engagement with challenging tasks – and also with other people, as discussed next.

**Interpersonal Interactions**

Most work roles involve interacting with others. Dealing with people in an open, respectful, and helpful manner generally yields interactions that are meaningful and psychologically safe for all concerned (Kahn, 1990). Implicit theories play a key role in whether interactions unfold in this manner, or alternatively in a way that leaves the interacting parties feeling judged, disconnected, and frustrated.

Assuming that one’s traits are fixed leads to self-consciousness and anxiety about being judged by other people (Cury et al., 2008). Resulting shyness and defensiveness harms the quality of entity theorists’ interpersonal interactions by reducing the extent to which they proactively engage with other people and view social situations as a learning opportunity (Beer, 2002). In contrast, even when incremental theorists are shy, making them initially nervous in encounters with new people, Beer observed that after the first five minutes they tend to nonetheless act in a sociable manner that engenders mutually enjoyable interactions.

Such social investments probably reflect incremental theorists’ inclination to engage with other people in a helpful rather than a judgmental manner. Conversely, holding an entity theory leads to believing that even a single undesirable behavior sends a clear negative signal about the type of person someone is (Erdley & Dweck, 1993; Chiu, Hong, & Dweck, 1997), together with an inclination to stereotype (Levy, Stroessner, & Dweck, 1998) and punish others for their perceived transgressions and character flaws (Chiu, Dweck, Tong, & Fu 1997; Erdley & Dweck, 1993; Gervey, Chiu, Hong, & Dweck, 1999). Entity theorists’ tendency to blame others and seek revenge can become markedly self-defeating, as illustrated by a woman who indicated that with regard to her ex-husband: “If I had to choose between me being happy and him being miserable, I would definitely want him to be miserable” (Dweck, 2006, p.140).

Incremental theorists approach interpersonal challenges in a much more constructive, forgiving, and helpful manner (Chiu, Dweck, et al., 1997; Dweck, 2006; Heyman & Dweck 1998). For example, Chiu, Dweck, et al. (1997) observed that instead of acting like the entity theorists who wanted to punish a professor for a seemingly unfair last-minute change in grading policy, the incremental theorist students were more forgiving and disposed to encourage the professor to do the right thing. Incremental theorists consultative and non-judgmental approach
probably helps them to outdo their entity counterparts at discovering the kinds of win-win alternatives (Kray & Haselhuhn, 2007), as well as meaning, psychological safety and availability associated with engagement (Kahn, 1990).

To summarize, holding an incremental implicit theory increases – and an entity implicit theory undermines – employees’ zeal for development, belief in the utility of effort, attentiveness to new and useful information, and likelihood of construing “failures” as challenging and energizing, rather than undermining and debilitating. Holding an incremental theory also buffers people from being distressed by setbacks, though decreases their tolerance for working in roles where their efforts are unlikely to yield clear performance improvements. Finally, incremental implicit theories facilitate peoples’ willingness to engage with others and deal constructively with misaligned agendas, priorities, and convictions about appropriate modes of conduct.

**IMPLICIT THEORIES AND MANAGERIAL STYLE**

Managers’ implicit theories affect how they treat their subordinates. Specifically, the extent to which managers hold an incremental implicit theory predicts their vigilance to both improvements and decline in employee performance (Heslin et al., 2005). Managers who do not recognize performance improvements are demoralizing and thereby erode employee engagement (Manzoni & Barsoux, 1998). Vigilance to instances of decreasing performance is imperative for taking needed remedial action.

When performance improvements are required, holding the entity assumption that human attributes are innate and essentially unalterable makes managers disinclined to invest effort in coaching their employees (Heslin, VandeWalle, & Latham, 2006). Related research shows that an incremental implicit theory positively predicts managers’ perceived fairness in dealing with their employees (Heslin & VandeWalle, in press) – a critical factor for psychological safety and thus enticing employees to identify with their work and passionately invest themselves in performing it (Blader & Tyler, 2005; Grant & Sumanth, 2009).

Importantly, this discussion should not be misconstrued as suggesting that an incremental theory is sufficient for engagement. This is because of the key role played by the many contextual antecedents of engagement outlined earlier, such as whether employees have challenging, enriching jobs and a supportive work context. The mechanisms linking implicit theories and employee engagement are nonetheless adequately compelling to warrant consideration of the organizational, managerial, and personal levers for fostering incrementalism.
PRACTICAL IMPLICATIONS: CULTIVATING INCREMENTAL IMPLICIT THEORIES

If entity implicit theories are so toxic to engagement, why are they still prevalent within contemporary organizations? Potential sources of entity and incremental implicit theories are organizational culture and managerial actions. Further insights into how the different theories arise – together with self-development opportunities for fostering an incremental implicit theory – can be derived from the research on persuasion and implicit theory priming discussed below.

Organizational Culture

Organizational cultures that glorify inherent genius – via cultural artifacts such as newsletters, speeches by top management, selection and promotion criteria, and award ceremonies – can elicit thoughts, feelings and behaviors indicative of an entity implicit theory (Murphy & Dweck, in press). Such theories might be cultivated by a strong focus on recruiting external talent who innately possess the right stuff for outstanding performance, illustrated by: “Sabre Holdings makes it a priority to recruit and retain only the brightest minds…” (http://www.sabre-holdings.com/careers/, Sept 13, 2009). Similarly, Enron was renowned for idolizing those few smartest guys in the room deemed to have the inherent brilliance – that most other people lacked – for engineering extremely profitable business deals (McLean & Elkind, 2003). Such a culture of genius was fueled by Enron’s performance review committee that methodically identified and summarily fired employees whose performance was ranked as the bottom 10-15%, thereby propagating the entity notion that at least some people’s abilities cannot be developed (Murphy & Dweck, in press).

Southwest Airlines, on the other hand, is renowned for its culture of continually cultivating employees’ abilities through considerable investments in training initiatives. SAS similarly emphasizes that: “SAS employees enjoy a supportive environment (and) outstanding opportunities for professional growth” (http://www.sas.com/jobs/, Sept 13, 2009).

Murphy and Dweck (in press) proposed that within organizations, shared beliefs that intelligence is primarily a fixed and stable trait can be considered to reflect a “culture of genius” (p.3), while shared beliefs that intelligence is essentially malleable and expandable reflect a “culture of growth” (p.3). Besides the factors already mentioned, another potential indicator of whether an organization has a culture of growth or genius is the basis used for appointing people to challenging, high profile assignments. In cultures of genius, organizations are likely to select the most highly qualified candidates, whereas developmentally-oriented organizations give serious consideration to those candidates whose performance capability might be most developed by assuming a challenging new role for which they are not yet fully prepared (Michaels, Handfield-Jones & Axelrod, 2001).
Pending the results of direct research on this issue, it seems likely that organizational practices, statements by top leadership, and other factors that generate and perpetuate a culture of growth might foster employee engagement by increasing individual and shared incremental implicit theories. Examples of practices likely to underscore employees’ growth potential include comprehensive on-boarding, mentoring, special assignments, multisource feedback, sponsored continuing education, and study leave programs. Publicizing inspiring profiles of real-life career journeys within the organization – focusing not only on those whose careers have led them to the upper echelons – could also serve as a powerful message that employee growth is possible.

**Managerial Actions**

Managers often have a powerful influence on their employees’ thoughts, feelings, and behavior (McNatt, 2000). Research (Mueller & Dweck, 1998) has found that applauding good performance as a reflection of how smart or gifted someone is, rather than how hard and diligently she or he has worked, fosters an entity implicit theory. As a result, employees become focused on not jeopardizing the treasured self-impression of being smart, and their subsequent engagement and performance is diminished (Mueller & Dweck, 1998). On the other hand, leaders making attributions to the processes (e.g., working hard, seeking feedback, working systemically, etc.) that enabled good performance creates an incremental mindset (Mueller & Dweck, 1998). This seminal finding highlights the potential peril to employees’ incremental implicit theories of well-intentioned managers labeling their subordinates using ostensibly supportive trait terms such as *star performer, superstar* or *A-player* (cf, Michaels, Handfield-Jones & Axelrod, 2001). Such labels can inadvertently cause top performers to adopt an entity implicit theory.

Mueller and Dweck’s (1998) study also suggests a range of approaches for providing positively reinforcing feedback that fosters rather than erodes incremental implicit theories. The common theme within each approach is praising the *process* employees undertook to attain a good outcome (e.g., a sale or positive client evaluation), as opposed to their *traits* that enabled them to do it. Examples include underscoring to employees what they achieved after setting challenging goals, working hard, persisting in the face of setbacks, and systematically striving to identify ways to improve. As long as such feedback is sufficiently grounded in reality to be credible, this approach to describing what employees have done to perform well – rather than who or what they are – has clear potential to foster incremental implicit theories and subsequent employee engagement.

Experienced managers are familiar with having disengaged and demoralized employees who exhibit few positive behaviors or results justifying reinforcement. Even in such situations, there are options available that can help entity theorists adopt a more incremental perspective (Aronson, Fried, & Good, 2002; Heslin et al., 2005). Based on the experimenter-led incremental
training program of Heslin et al. (2005), a four-step procedure managers or trainers might use to cultivate employees’ incrementalism is outlined in Table 1.

**TABLE 1:**

**Incremental Implicit Theory Development Procedure** (adapted from Heslin et al., 2005)

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
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<tr>
<td>1.</td>
<td><strong>Highlight the brain’s growth potential.</strong> Share with employees that neuropsychological research is revealing that whenever we focus our minds and learn something, new connections are established in our brains. Thus, the brain and its abilities are capable of growing like a muscle throughout life, whenever they are exercised properly. This message can be usefully supplemented with anecdotes of how familiar people – ultimately including yourself – have substantially developed certain abilities, sometimes beginning later in life. To supplement your personal anecdotes, many compelling illustrations of how great performance capabilities result more from years of persistent deliberative practice than from innate talent are provided by Gladwell (2002, 2008), Dweck (2006), and Colvin (2008).</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Elicit counter-attitudinal reflection.</strong> Have employees identify an area (e.g., using a complex web-based application, playing golf, speaking a second language) where they had initially struggled but now perform well and with relative ease. Encourage them to explicitly explain in detail the steps they took along their developmental path (e.g., setting goals, taking risks, getting lessons, practicing hard, seeking feedback, etc.). Then ask the employees to ponder why similar initiatives might not work just as well in an area where they doubt whether they have any ability to develop.</td>
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<tr>
<td>3.</td>
<td><strong>Elicit counter-attitudinal advocacy.</strong> Have employees identify someone they care about (e.g., a parent, child or protégé) who is struggling to believe that his or her ability can be cultivated. Have them write an encouraging 2-3 page message to this person in which they outline, in their own words, the reasons and evidence that abilities can be developed, including meaningful personal anecdotes such as those generated during the prior counter-attitudinal reflection exercise.</td>
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<td>4.</td>
<td><strong>Induce cognitive dissonance.</strong> Have employees identify three instances when they observed somebody learn to do something that they earnestly thought this person could never do. Then invite them to ponder what could have been the implications of them doubting this person’s capabilities. Leading people to reflect upon the potentially huge cost of an entity implicit</td>
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theory – in terms of constraining other people and themselves from realizing their potential – is a compelling way to foster an incremental implicit theory.

Next we discuss some self-development actions that individuals can undertake to cultivate an incremental implicit theory within themselves.

**Self-Development Initiatives**

People think, feel, act, and interact like an incremental theorist when they construe challenging situations as opportunities for learning, growth, and attainment, rather than as encounters in which their (lack of) inherent abilities will be measured and judged. In order to make the incremental implicit theory more salient within themselves, employees are encouraged to work through the procedure outlined in Table 1. When doing so, it is worth keeping in mind that public commitments and social learning can powerfully mold personal convictions (Aronson, 1999). Thus, to get the most out of these exercises, it is recommended that employees complete them in pairs or small groups, before reading aloud and discussing their responses.

Even when collaborators are not available, self-persuasion theory (Aronson, 1999) and research on implicit theory priming (e.g., Dweck, 1999, 2006; Heslin et al., 2005; Levy & Dweck, 1998; Nussbaum & Dweck, 2008; Wood & Bandura, 1989) provides the conceptual basis for self-development initiatives to cultivate an incremental implicit theory. Ten such initiatives are outlined Table 2.

**TABLE 2:**
**Self-Development Initiatives for Creating an Incremental Implicit Theory**

<p>| | |</p>
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<tr>
<td>1.</td>
<td>Think of challenging tasks as an exciting opportunity to learn what works and does not work well, rather than as a barometer of whether you have natural ability or a gifted in a particular area.</td>
</tr>
<tr>
<td>2.</td>
<td>Think of your successes and failures as reflecting the quality of your effort, strategies and choices, rather as indicators of your (lack of) innate talent.</td>
</tr>
<tr>
<td>3.</td>
<td>Ponder the process whereby you cultivated your abilities to read, write, and do math. Remember that few worthwhile capabilities are acquired without persistent effort and plenty of frustrating setbacks along the way.</td>
</tr>
<tr>
<td>4.</td>
<td>Recall when you felt humiliated by a performance setback. Ponder what you can learn from it and how such events rarely define one’s ultimate performance capabilities. There are few</td>
</tr>
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definitive tests of capabilities and, with focused practice, learning and growth are virtually always possible. Thinking of yourself as an eager student can enhance your engagement and enjoyment of challenges, especially when you sense you are failing.

5. Believing and proclaiming that you would like to change in a certain area, but that’s just the way I am, may reinforce the entity perspective that your behavior is essentially a function of fixed traits. Instead, explicitly and consistently recognizing your scope for choice and personal change may foster the incremental mindset that facilitates engagement.

6. Investigate the background of someone whose talent you truly admire. Does your research suggest that their talent was merely innate, or did they also develop it through tremendous, sustained effort?

7. Think of something you have always wanted to learn to do, but never believed you had it in you. Now execute a concrete plan to learn to do it.

8. Ponder and relish the process of developing your skills, including when you inevitably make mistakes along the way. Be proud of learning from your mistakes rather than falling into the entity trap of feeling judged by them.

9. Strive to value and feel genuinely proud of your learning and growth, as well as your performance attainments.

10. Resist the temptation to surround yourself with people focused on validating your brilliance, rather than also challenging you to grow.

A well-established maxim within the persuasion literature is that vivid and extensive exposure to certain ideas – particularly when those ideas are self-generated (Aronson, 1999) – increases their accessibility and thus influence on people’s subsequent thoughts, feelings, and behavior (Crano & Prislin, 2006). This is why diligently completing the exercises outlined in Table 2 has potential to cultivate an incremental implicit theory and subsequent engagement.

**RESEARCH IMPLICATIONS**

In striving to supplement the substantial literature on contextual antecedents of employee engagement, this paper has theorized about the relationship between implicit theories and employee engagement. The relationships between implicit theories and the mechanisms of zeal for development, view of effort, vigilance, interpretation of setbacks, and interpersonal interactions illustrated in Figure 1 are empirically well-established. Research directly testing the
relationship between implicit theories and employee engagement, as mediated by these mechanisms, is now warranted.

It has been established that an experimenter-led variation of the procedure outlined in Table 1 is able to persuade entity theorists to adopt incremental implicit beliefs that last for at least six weeks (Heslin et al., 2005). Research is needed on the efficacy of this procedure used in a self-directed fashion, together with the other theoretically-derived proposed antecedents of incremental implicit theories and subsequent employee engagement.

CONCLUSION

An incremental implicit theory is no magic bullet for employee engagement. As with any human experience, engagement is the culmination of a vast array of contextual and other factors such as those identified in the opening paragraphs. For instance, when work is mundane and organizational support is lacking, an incremental implicit theory alone is not expected to yield much engagement. All else being equal, however, we believe that the concept of implicit theories has potential to offer a fresh, conceptually grounded and practically useful approach to understanding and fostering employee engagement.

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SOCIAL NETWORKING AS UNCONSCIOUS IMPRESSION MANAGEMENT: 
THE EFFECT ON INTENTION TO INTERVIEW

Stacie Bowie, Coastal Carolina University, sbowie@coastal.edu
Darla Domke-Damonte, Coastal Carolina University, ddamonte@coastal.edu

ABSTRACT

This study explores the effect of both conscious impression management (through positive and negative letters of recommendation) and unconscious impression management (through positive and negative social networking site depictions) on intentions to interview a job applicant. The results of the study involving 237 undergraduate business students indicated significance of the direct effects and interaction between the impacts of letters of recommendation and social networking site depictions on intentions to interview.

SOCIAL NETWORKING AS UNCONSCIOUS IMPRESSION MANAGEMENT: 
THE EFFECT ON INTENTION TO INTERVIEW

It has long been noted that job applicants use conscious impression management tactics in their attempt to obtain interviews, and ultimately, jobs (Cole, Rube, Field & Giles, 2007; Kacmar & Carlson, 1994; Thoms, McMasters & Nordstrom, 1999). More recently, the increasing use of social networking sites has effectively blurred the lines between professional and private lives and information sharing (Casey & Stephens, 2008). A recent study of more than 220 human resource directors conducted by the Charles Russell law firm indicated that currently about 27% of the directors use a social networking website as a hiring tool (Personnel Today, 2008). Both the research of applicants and recruitment efforts are two areas currently explored by human resource directors in their viewing of social networking sites. Burd and Davies (2007) noted that 20% of employers are using social networking sites to vet applicants, while Brocket (2007) confirms 20% of recruiting firms use social networking sites to research applicants and that 68% of recruiting firms use search engines to check candidates “netreps”. At the same time, Peluchette and Karl (2008) noted that undergraduate students expressed concern about employers’ access to information on the students’ sites. Therefore, in many cases, a job applicant’s conscious impression management, through crafting effective resumés and requesting letters of references to support his or her application for a specific position, may be being supplemented by impressions that potential employers are deriving from their viewing of the job applicant’s self presentation on social networking sites.
As a result, a 2x2 experimental design was developed to determine the impact on the intention to interview a prospective qualified candidate when a conscious form of impression management, the letter of reference, and an unconscious form of impression management, images found on social networking websites, are presented. From a theoretical standpoint, this study will extend impression management research into interview decision making realms, since much of the research to date has been focused on intent to hire as opposed to the intention to interview. Since candidates must make it through the door to get the interview, before having a chance to modify impressions through their personal self presentation in the interview, it is important to extend the literature in this manner. Second, this study explicitly tests both conscious and unconscious impression management tactics on intentions to interview. Finally, this study will extend the limited research to date on the impact of social networking sites on employment process research. From a practical standpoint, it is important to understand whether social networking sites, if viewed by potential employers, have any impact on employment related decisions. Such an impact, if uncovered, would prompt greater concern over issues associated with fairness and discrimination by employers in their review and consideration of such materials as a part of the hiring process, increased scrutiny of the freedom to post materials on their social networking sites by individuals seeking jobs, and ultimately consideration for privacy filters and processes by social networking sites.

The following sections provide a review of the research literature on person-job fit in decisions to interview, impression management in the job application process, and social networking sites as a mode of unconscious impression management in the job application process. Hypotheses and a research model are developed, the methods used to test the hypotheses are described, and results presented.

**LITERATURE REVIEW**

**Identifying Person – Job Fit in Decisions to Interview**

Hiring qualified personnel into vacant positions first requires defining the job so that potentially qualified applicants can apply. Applicants’ resumés and additional materials are then screened using the requirements of the job as a basis for comparison. To get to the interview process the applicant has to first make it through the initial screening and be offered an opportunity to interview. An applicant is selected based on their qualifications usually during an interview. Person-organization (P-O) fit and person-job (P-J) fit are two criteria used to identify applicants who should be interviewed based on the resumé.

P-O fit is described by Judge, Higgins, and Cable (2000) as the congruence between the organization’s attributes and a person’s attributes. That congruence can be actual as discussed by Cable and Judge (1997) or perceived from the interviewer’s perspective. Subjective P-O fit
evaluations refer to the interviewer’s perception of the candidate’s congruence based on a judgment of the applicant as a whole (Judge et al. 2000). DeCamp (1992) and Vassenes (2001) allude to the importance of P-O fit as part of the job description with reference to the job description containing 70% job behaviors and how the position fits in with the overall mission respectively.

Research conducted relating to P-O fit is scattered between actual congruence measures and perceived congruence through an interviewer’s subjective evaluation. Rynes and Gerhart (1990) used feedback from two interviewing seasons in which 86 organizations interviewed 156 MBA graduating students in the first season, and in the second season, 83 organizations interviewed 190 MBA graduating students from top five to top twenty Ivy League business schools. Interviewers reported on subjective characteristics, objective characteristics and employability. The results indicated that fit goes beyond objective qualifications and even beyond general employability. Subjective qualifications and factors do influence recruiter’s assessment of organizational fit.

Furthermore, Adkins, Russell and Werbel (1994) used 534 interviews of 171 applicants by recruiters as a basis to first verify the results Rynes and Gerhart (1990) achieved regarding the independence of employability and P-O fit. The results verified the findings of Rynes and Gerhart (1990) which states that general employability is easier to achieve than P-O fit. Findings indicate that the recruiter’s judgment about P-O fit was determined to either be applicant-recruiter work value congruence or applicant – “universal” or ideal applicant work value congruence. Adkins et al. (1994) refer to this finding as “similar-to-me” bias or “similar-to-an-ideal” bias. Requests of the applicant for second interviews were based on employability ratings more so than P-O fit; however, limitations of the study indicate that second interview decisions were not made by the same individuals conducting the first round interviews.

Kristof-Brown (2000) studied both person-job or P-J fit as well as P-O fit with respect to knowledge, skills and abilities (KSAs) impacting recruiter’s judgments on P-J fit and P-O fit, and in a second study hiring recommendations as they relate to P-J fit and P-O fit. KSAs were mentioned more with respect to P-J fit then P-O fit and values were mentioned by 65% of recruiters in reference to P-O fit and 39% for P-J fit. Personality traits however, were mentioned by 100% of recruiters in assessing P-O fit and 81% for P-J fit.

In addition, Kristof-Brown (2000) used the definitions in the study conducted by Rynes and Gerhart (1990) to define perceptions of applicant characteristics. Kristof-Brown (2000) found that 74% of the characteristics reported as indicators of P-J fit and 73% of the characteristics associated with P-O fit were considered idiosyncratic preferences of the recruiter. Idiosyncratic preferences are defined as those that are recruiter specific and not shared by a majority of recruiters from the same firm. Cable and Judge (1997) analyzed responses of forty two recruiters
from 35 organizations who interviewed 112 applicants. Recruiters provided information on at least one successful applicant and one unsuccessful applicant and answered subjective questions about the applicants’ values and P-O fit. Recruiters’ assessment of P-O fit was found to be a result of perception between applicant work values and organizational values. In addition, subjective P-O fit perception was a predictor of recommendations to hire, and hiring decisions were based largely on these recommendations. Cable and Judge (1997) then compared the perceived values and P-O fit of the applicant with the actuals as reported by the applicants themselves. The subjective assessments were found to often be inaccurate from the applicant’s perspective but were largely used to make the hiring recommendation. Given that both experience related to the job and personal subjective assessments have been shown to be relevant to offering job candidates an interview, it is relevant to consider how job applicants seek to manage the perceptions of job screeners. Impression management provides a strong theoretical grounding to this process. As such, the next section of this paper explores how impressions are managed by job applicants through the job application process.

Impression Management in the Job Application Process

Impression management (IM) is defined as an individual’s attempt either consciously or unconsciously to control the images they project in social situations (Schlenker & Forsyth, 1980). IM behaviors include verbal, non-verbal and modifications to appearance (Iddekinge, McFarland, & Raymark, 2007). Kacmar, Delery and Ferris (1992) categorized verbal IM as either assertive or defensive and either self-focused or other-focused. Assertive IM is defined as behaviors which actively portray a favorable image. Defensive IM is a protective measure to defend one’s reputation or actions. Self-focused IM is defined as self-promotion and other-focused is directed at another person such as the interviewer. IM behaviors may be both conscious and unconscious (Giacolone & Rosenfeld, 1989). In the context of the initial job application process, IM behaviors are consciously manipulated by the job applicant to present a specific image of the job applicant to the prospective employer. Two of the ways in which impressions are actively managed by candidates are through resumés and letters of reference.

Resumés. Typically, research into impression management tactics are focused on verbal, non-verbal, self-focused or other-focused tactics in an interview setting and not in the pre-interview selection or screening phase of the hiring process. The pre-screening process is every bit as important as the interview itself. If an applicant never makes it to an interview they do not have a chance to show their abilities or be considered for the position. Kacmar and Carlson (1994) suggested that IM tactics be used in both the resumé and the cover letter so that the applicant can effectively portray to the screener the applicant’s abilities and fit for the job. Early resumé research was devoted to the notion of recruiters’ impressions based upon applicants’ qualifications as listed in their resumé including GPA, relevant work experience, course work, objective statement, and statements of accomplishment (Thoms et al. 1999). The applicant’s
goal was to positively manage impressions and influence the reader even when the reader was unknown. However, Thoms et al. (1999) noted that human resource professionals in the study were less likely to select resumés of candidates who included statements of accomplishment in their resumé. Knouse (1994) examined impression management in multiple versions of resumés differing education, experience and levels of impression management. Impression management was found to increase hiring manager’s perceptions of candidates and could compensate for a weakness in either education or experience but would not compensate for weakness in both.

Additionally, research has been done to investigate the impact on applicant screeners by the presence of or by the omission of information in an applicant’s resumé. The falsification of facts or omission of facts is a defensive impression management tactic. Wood, Schmidtke, and Decker (2007) examined the reactions to information presented to interviewing managers post resumé and application. This external information was either the omission of information that should have been in their application or updated information which showed falsification of information actually presented. This study’s relevance to the present inquiry is the impact on the interviewer after additional information was presented. College students were less likely to hire anyone who misrepresented information than were human resource professionals. The study revealed that managers were less likely to hire an applicant when the additional information had a high relevance to job performance and qualifications.

It is also important for applicants to know what to include in their resumé and the impact it will have on screeners. Cole et al. (2007) tested the theory that that academic qualifications, work experience and extracurricular activities are positively associated with recruiters’ assessments of applicant employability. Academic achievement and extracurricular activities were positively associated with employability ratings. The study also concluded that the interaction between the three resumé items were related to employability in that low academic achievement, low work experience, and low extracurricular activity levels resulted in the lowest perception of employability. High work experience and high levels of extracurricular activity resulted in virtually the same employability rating no matter the level of academic achievement. Thus, it is clear that impression management through the addition of extracurricular activities could have an impact on the screener’s perception of the resumé and in turn the employability of the applicant themselves. From the above referenced research, it is clear that resumés may influence job screener interpretations of job and personal qualifications for the respective job. As such, the following hypothesis is proposed:

Hypothesis 1 – Evidence of relevant job qualifications on the candidate resumé will be positively associated with intention to interview.

Letters of Reference. By providing letters of reference, an applicant is actively managing impressions through co-opting the status, experience, or social standing of a third party to
influence the decision making of the job screener about the applicant’s suitability for the job. Letters of reference typically contain information about applicant’s personality characteristics, work habits and work experience. Colarelli, Alampay, and Canali (2002) sampled 532 recommenders of 169 applicants for two junior faculty positions to determine if more favorable or longer letters were written for applicants to which there was a cooperative relationship, a higher social status or a mating interest. Letters were longer and more favorably written by referees who had a cooperative interest in the candidate. However, status difference did not make a difference in the favorability or length of letters written. Males wrote more favorable letters for females but not longer letters. Colarelli et al. (2002) concluded that letters of reference are perplexing in that they are widely used in human resource management, have a significant impact on hiring decisions, but are poor indicators of future performance and are not reliable.

Tommasi, Williams and Nordstrom (1998) used letters of reference to determine which information within the letters influenced recommendation to hire. Twenty-seven human resource managers each reviewed forty letters of reference. They were asked to distinguish between relevant and irrelevant information, to judge likelihood to interview and likelihood to hire. With varying formats of letters of reference and the inconsistent way in which they are used to determine intentions to interview and intentions to hire, the letters were not found to be reliable as a way to make determinations about job candidates.

Templer and Thacker (2002) attempted to verify results obtained by Knouse (1983) stating that longer reference letters and those containing specific examples about a candidate were perceived as more credible by the potential employer. Five hundred thirteen business students read one of nine versions of a letter of reference and were asked to complete a fifteen item questionnaire. The letter containing the examples was perceived to be written by someone who knew the candidate better and using the letter only were more likely to hire the candidate than by using the letter without specific examples. A manipulation on the amount of time specified that the written knew the candidate did not have an impact on perceptions by the reader. The use of specific examples and longer letters seem to provide stronger impression management tools (Templer and Thacker, 2002). Based on the above research, the following hypothesis is proposed:

Hypothesis 2 –Evidence of prior job performance through letter of reference will be associated with the intention to interview, such that positive references will be positively associated with intent to hire and negative references will be negatively associated with intent to hire.

In addition to conscious IM behaviors, such as those managed by the job applicant through resumés and requests for letters of reference, job candidates also unconsciously manage impressions through their representations of themselves to the potential employer. In Impression Management in Organizations, Giacolone and Rosenfeld (1989) noted that individuals seek to
both consciously and unconsciously project their “self” to others. They note that these actions are geared at acceptance by or affiliation with groups to which they want to be associated and known. This notion is central to the apparent conflict that has recently arisen about the use of social networking sites by employers to review job applicant suitability for a job. While the job applicant may perceive that his/her sharing of personal information and behaviors on social networking websites is directed at conscious and unconscious management of impressions with his/her peers, technology has enabled this information to be viewed by others. For potential employers, who also seek to manage impressions to the world external to their organization, the potential range of behaviors of their employees may be relevant to developing and protecting the “self” of the organization, and by extension the “self” of the hiring manager. In a 2008 poll, conducted by Personnel Today and the Charles Russell law firm, of more than 220 human resource directors concern revealed the study is the discovery of inappropriate material posted by employees that identify the employer. 60% of the human resource professionals say that disciplinary action should be taken against these employees. This opinion was consistent whether the employee posted the images during work time or outside of the work environment. As such, it seems appropriate to explore the use of social networking websites and whether their use by job applicants may in fact affect intentions to interview, and ultimately, to hire. The next section explores the background of social networking websites and research into their use.

**Social Networking Websites as Unconscious Impression Management in Job Applications**

Social networking websites have been used for just over a decade. Boyd and Ellison (2007) provide a history of the evolution of the websites from their beginning as help for those looking for a significant other to today. Social networks began with the creation of profiles on dating websites such as Match.com. These sites did not allow for the creation of “friends” and the visibility of these friends by those in the network. In its more modern form, sites such as SixDegrees.com was launched in 1997 and Friendster in 2002. SixDegrees.com was thought by some to be before its time and Friendster imposed rigid rules not allowing for “fake” profiles such as companies or bands. Friendster imposed a four degree limitation on friends such that users could only access Friends of Friends of Friends of Friends. This caused the creation of the “fake” websites.

When users began abandoning Friendster, they moved onto MySpace.com which was launched in 2003 allowing and encouraging the profiles by bands so they could connect to their fans and fans could be a part of their network. Bands, teens, and post-college users were the main profiles found on MySpace. The teens and post-college users did not typically interact with each other. The friends on this site had to be requested by the user and the recipient of the request had to approve. In 2004, Facebook.com was launched as a private network for Harvard students only. By 2005, other colleges and high school users were allowed to utilize the site. Proper email addresses or administration approval, in the case of the high school students, was required for
permission to set up a profile. Overall, profiles on social network sites can be set to private or can be shared only with people considered a “friend”. In a September 2008 interview with Michael Stephens, Assistant Professor, GSLIS, Dominican University, in IL, Michael indicates that the line between personal and professional is blurred to the point where it is difficult to distinguish between the two (Casey & Stephens, 2008).

This issue is central to the potential and use of social networking websites in job-related decisions. To date, research involving social networking websites has been focused on impression management and the use and structure of “friends”. Valkenburg, Peter, and Schouten (2006) surveyed 881 adolescents between 10 and 19 years old to determine if feedback from their “friends” impacted self-esteem and well being. The conclusions were that positive feedback enhanced self-esteem. Gangadharbatla (2007) surveyed 237 undergraduate students between the ages of 19 and 30 and found a positive relationship between collective self-esteem and students’ attitude toward social networking websites and their willingness to join.

Limited research has been performed in the area of utilizing social networking websites for job applicant screening or the impression made upon those hiring when information is discovered about a potential applicant. Peluchette and Karl (2008) surveyed 244 undergraduates about their social network usage, and 80% responded that they did use at least one site with more than half of the students logging in at least once per day. The respondents were favorable to friends seeing their profile but were neutral as far as employers or strangers. In addition, 20% indicated that there were in fact items in their profile that they did not want employers to see. Items the students did not want employers or potential employers to see included party or alcohol related photos, comments from friends, comments about work, and inappropriate humor. Both males and females expressed concern over employers having access to their profiles. Males, though, expressed less concern. Students seemed to feel that employers or potential employers should be able to differentiate social lives from that of professional behavior. They did not feel that the site content should be considered an indication of behavior on the job.

Stutzman (2006) indicated that users of social networking websites do not have an aversion to sharing their profiles with strangers. This finding was indicated by an average score of 3.15 on a scale of 1 to 5 to answer the question “I am OK with strangers accessing my SNC profile.” The average score was 2.66 on the same scale to the question “I believe my identity information is well-protected online”. While only slightly more than half of the respondents indicated that they believe their identity information, which includes photo profile, is well-protected, well more than half do not have a problem with strangers accessing their information.

As noted earlier, both the research of applicants as well as recruitment efforts are the two areas currently explored by human resource directors. 35% of human resource professionals in the areas of media, professional services and finance use social networking websites to research
applicants. Only 8% of charities and 7% of retail firms use these websites (Personnel Today, 2008). Brocket (2007) confirmed that 20% of recruiting firms use social networking websites to research applicants and also ads that 68% use search engines to check candidates “netreps”. This finding indicates that job screeners feel like they are getting an insight into the applicant they would not otherwise get from the traditional resumé and application. Given that social networking websites are increasingly being reviewed by job screeners to review job applicants and that there is a wide variety of information being provided on these social networking websites, the following hypothesis is proposed:

Hypothesis 3 – Perceived candidate behaviors through social networking website information will be associated with intention to interview, such that negatively perceived social networking site depictions will be negatively associated with intention to interview.

Furthermore, given that candidates actively seek to manage impressions of potential employers through resumés and letters of reference with the goal of obtaining an interview and ultimately a job, as argued above, it is not unreasonable to assume that the automatic, unconscious impression management through social networking websites that employers may review as a part of their background checks on individual job candidates may influence any references provided through more active impression management processes employed by the job candidate. As such, the following hypothesis is proposed:

Hypothesis 4 – Perceived candidate behaviors through social networking website information will moderate the effect of letters of reference such that more negatively perceived social networking site depictions will be associated with a lower intent to hire.

The following model depicts the relationships described in the above hypotheses. The model represents the impact on an applicant screener’s intention to interview when an applicant is qualified and proposes that intention to interview can be affected by additional information presented by the candidate through conscious IM behaviors and proposes that unconscious IM behaviors may seep from intended IM behaviors for peer groups into unintended unconscious IM behaviors directed toward employers. The following section describes the methods used to test the hypotheses proposed in the study.
METHOD

This study investigated the impact on intention to interview when the interviewing manager was provided with additional information beyond the candidate resumé. To isolate the impact of letter of reference and social networking website depiction on intention to interview, an experimental design was developed via a 2 (positive or negative letter of reference) x 2 (positive or negative social networking website presentation) factorial design, where the resumé was held constant for all respondents. Respondents were asked to fill out a survey which contained a hiring scenario, resumé, letter of recommendation, and a picture from a social networking website. Respondents were provided only one of four surveys: positive letter of reference with positive social networking website picture; positive letter of reference with negative social networking website picture; negative letter of reference with positive social networking website picture; and negative letter of reference with negative social networking website picture. In the following sections, the development of the instrument is described along with the manipulation checks on the study variables, the procedure for data gathering is described, and the analytical processes are discussed.
The description of job duties was compiled using jobs posted on Monster.com as a guide. A review of assistant manager positions on the site assisted in the creation of the job duties listed. Questions related to the understanding of the job duties and whether the respondent felt that the duties were accurate for the type of job described. The questions were used to gauge the respondents’ level of understanding of the job itself prior to asking questions about the applicant’s qualifications. Understanding of the job description was assessed in the instrument provided to the respondents by means of two questions: 1a: “I understand the position responsibilities described in the job description above;” and 1c “I believe that the job description above is an accurate reflection of the job duties of an assistant manager.” Analysis of variance by groups completing the survey was done to check whether respondents understood the job description. Inspection of the Levene statistic (1a: p = .171; 1c: p = .585) indicated homogeneous variance across all groups, and the resulting ANOVA indicated that respondents’ understanding of the description of job duties did not differ significantly between groups for question 1a (F = .206, p = .893) or question 1c (F = .713, p = .545). In addition, 93.2% and 90.3% of respondents, respectively, answered with a score of 4 or above (on a 7-point strongly disagree – strongly agree Likert scale) to question 1a and 1c, which indicates that respondents understood and felt that the job description was accurate for the position being evaluated.

The résumé used was modeled after the résumé used by Segrest (1999). Educational, work experience and extracurricular activities are all included to increase perceived employability (Cole et al, 2007). Impression management techniques were also used such as a declaration of dedication, hard working, and courteous. The self promoting attempts at impression management on behalf of the applicant to influence the screener are known to compensate for other areas of weakness if any exist (Knouse 1994). Questions relating to the résumé were designed such that respondents would indicate whether they felt the résumé was well organized and provided useful information as well as whether the résumé showed relevant qualifications and personal traits in line with the assistant manager position. The résumé was the same in each survey and was intended to show a qualified applicant in order to test the manipulations of letter of recommendation and social networking website picture.

The variable Perceived Job Qualifications was developed by the following process. A series of four questions were developed: 2a: Mr. Smith’s résumé is well organized and neatly presented, 2b: Mr. Smith’s résumé provides useful information, 2c: Mr. Smith’s résumé shows work experience relevant to the assistant manager job descriptions, 2d: Mr. Smith’s résumé shows personal traits relevant to the assistant manager job description, to assess whether respondents believed that the résumé was appropriate for the job. The questions were adapted from the study performed by Kristof-Brown (2000). Because the résumé was established to contain relevant information to prompt an invitation for an interview for a job candidate (Cole et al. 2007) and because the résumé remained constant across all conditions and respondents in the present study, it was important to ascertain whether there were any differences in perceived qualifications.
across groups completing the survey. Thus, manipulation checks were completed on the answers to the questions related to the resumé.

To check the manipulation of the responses to questions about Mr. Smith’s resumé, questions 2a through 2d were checked by conducting ANOVA using SPSS after the Levene Statistic test showed homogeneity of variances (2a: p = .066; 2b: p = .249; 2c: p = .383; 2d: p = .801; 2e: p = .053). Though multiple ANOVAs may inflate the possibility of error in the assessment, this preliminary analysis was designed as an exploratory look at differences across groups. Analysis of variance indicated that there were no significant difference in respondents’ responses by group for question 2a (F = .765, p = .515), 2b (F = 1.044, p = .374), 2c (F = .294, p = .829), 2d (F = .585, p = .625), and 2d (F= .844, p = .471). The expectation was that the resumé would clearly show that Mr. Smith was qualified for the job and based on the analysis the expectation is supported. The failure to reject the null hypotheses in each of the above responses provided some support to the notion that respondents perceived Mr. Smith to have similar job-related characteristics.

To derive a Perceived Job Qualifications variable, a factor analysis using principal components analysis was completed on questions 2a through 2d. Based on Kaiser’s criterion, one factor resulted (eigenvalue = 2.394; variance explained 59.86%). To test the reliability of this scale, a reliability analysis was performed which resulted in an alpha greater than the acceptability level of .70 (α = .7718). Given the single dimension identified from the factor analysis and the high reliability of that individual factor, items 2a -2d were summed to create the variable called “Perceived Job Qualifications.”

The manipulation of the letter of reference was such that a positive letter was written by one of the authors describing Mr. Smith as outstanding, cheerful, helpful, friendly, on time, hard-working and accurate. These traits were highlighted to enhance his perceived qualifications as compliments to the description of job duties as noted in Colarelli et al. (2002). The negative letter of recommendation described Mr. Smith as tardy and an employee who did not show up for work without calling on two occasions and most importantly that the author would not hire Mr. Smith again. These letters were intentionally kept the same length as longer letters are considered more reliable (Knouse, 1983, Templer & Thacker, 2002), and varying the lengths of the letters could impact reliability perceptions. The letters contained specific detail about Mr. Smith which increases the screeners’ perception of credibility and reliability with respect to the knowledge the author has about the candidate (Knouse, 1983). Intention to hire increases when letters contain more detail as well (Templer & Thacker, 2002). The letters were also written in a manner allowable by law. About 40 states have “job reference immunity statutes” (Fair Employment Practice Guidelines, 2006).
The question design in this section was such that the respondent would indicate his/her perception about whether the letter of reference provided relevant information about Mr. Smith’s work performance, responsibility, reliability, and dependability and were adapted from the study by Templer & Thacker (2002). Additional questions were asked to assess the respondent’s perceptions about the candidates work behaviors and whether or not those behaviors were relevant for the specific position in question. In order to fairly judge letters, they needed to be of the same length. Code 0 was used for the negative letter, and code 1 was used for the positive letter.

After checking the Levene Statistic on the homogeneity of variances (3a: p = .089; 3b: p = .425; 3c: p = .947; 3d: p = .199; 3e: p = .901), it was determined that an ANOVA test should not be used and the Welch Brown-Forsythe test would be run on questions 3a through 3e in exploratory data analysis. Questions 3a (This letter of recommendation provides relevant information about Mr. Smith’s work performance.), 3b (According to this letter, Mr. Smith has demonstrated strong work performance in the past), 3c (According to this letter, Mr. Smith was responsible in delivering on his daily work at Hollister), 3d (According to this letter, Mr. Smith was reliable and dependable in his work at Hollister, and 3e (According to this letter, Mr. Smith showed work behaviors that would be valued in an assistant manager position.) were used in the survey to evaluate the letter of recommendation. Results are not statistically significant for question 3a which asks if the letter provides relevant information (F = .188, p = .905), and question 3b through 3e where the results were statistically significant. 3a (F = .166, p = .000), 3c (F = .96, p = .000), 3d (F = .225, p = .000), and 3e (F = .153, p = .000). These results indicate that respondents believed that the letter of reference provided relevant information regardless of which letter they reviewed, but also that their perceptions about the applicant’s work-related behaviors differed significantly depending upon which letter that they received, with the positively framed letter resulting in significantly higher perceptions about Mr. Smith’s work-related behaviors than the negatively framed letter. As such the letters of reference were coded 1 for positive, and 0 for negative for input into further analysis.

Behavioral presentation from social networking websites was depicted by reviewing the categories proposed by Peluchette and Karl (2008) and a broad range of publicly visible Facebook webpages to identify representations of both positive and negative self depictions. Ultimately an individual who is of college age with a Facebook page volunteered to enable the use of any of the images on his page, which included pictures ranging from ballroom dancing (ultimately chosen to represent the positive self-presentation) to working with children to showing offensive hand gestures to smoking a pipe in a bar in Egypt (ultimately chosen to represent negative self-presentation). While this behavior was legal where he was engaging in it, the picture does not have a tagline and appears to depict potential illegal drug use. In picture selection, we gave a focus on picture quality and clarity of background and setting, but did not test multiple pictures for each representation.
Questions posed to respondents after viewing the pictures were set up as semantic differential on a 7-point Likert scale. Twenty one pairs were used and were adapted from Segrest (1999) and Sigelman et al. (1980). Three items depicted a negative quality on the lower end of the scale, while 18 items had the positive quality on the low end of the scale. The 18 items with the positive items on the low end of the scale were reverse coded when input for data analysis.

To derive a Perceived Characteristics variable, a factor analysis was completed for questions 4a through 4u which resulted in 3 factors (factor 1 = eigenvalue = 11.543; variance explained 54.96%, factor 2 = eigenvalue = 1.530; variance explained 7.29%, factor 3 = eigenvalue = 1.238; variance explained 5.90%). Upon further analysis of the makeup of the factors and the review of the Scree Plot, it was determined that one factor best captured the fit among the variables. The reliability analysis indicates strong fit among the variables (α = .9569). Thus, the variable, Perceived Characteristics, was developed as the sum of these measures.

Finally, questions were asked of respondents assessing the overall intention to interview the candidate. Seven questions were asked including personal likeability and satisfaction with the candidate from a company and hiring perspective. These questions were designed to bring together all information presented to make a final decision on the candidate and the screener’s intention to offer a follow up interview and potentially a job with the company. These questions will provide insight as to the outcome of the manipulations and how they worked together to create the final intent of the screener on interview decision. Intention to interview was measured by questions 5a through 5g. Question 5a (I would like to work with Mr. Smith), 5b (I feel very favorably toward Mr. Smith), 5c (I like Mr. Smith very much.), 5d (I believe that Mr. Smith would be an asset to my company), 5e (I would feel satisfied if I hired Mr. Smith), 5f (I will definitely offer Mr. Smith a follow-up interview for the assistant manager position), and 5g (I believe strongly that Mr. Smith will receive a job offer from our company for the assistant manager position) were intended to gauge the respondent’s intention to interview Mr. Smith. These questions were adapted from Segrest (1999). A factor analysis on these variables was conducted using principal components analysis which resulted in one factor (eigenvalue = 5.545; variance explained 79.22%). The subsequent reliability analysis conducted shows a strong fit among the items (α = .9273) and thus the responses to these items were all summed to create the Intention to interview variable.

An initial pilot test was conducted on a sample of 46 students from a senior-level course within the College of Business at a regional university in the Southeastern United States. Students were chosen based on the research done by Peluchette and Karl (2008) in that 80% of the students surveyed used social networking websites and more than half accessing these sites everyday as well as the research conducted by Stutzman (2006) reviewing privacy concerns of students. Students understand the information, its source, as well as, have the ability to be in retail
management positions either currently or in the near future. Students are the hiring managers of the future and as usage of social networking websites grows, bringing awareness to these students through the survey is another benefit. Students were informed prior to their participation in the survey that their participation was optional. Each was asked to read the informed consent form, sign, date, tear it from the front of the survey, and return it to the proctor separately from the instrument itself. The survey took individual respondents between six and fourteen minutes to complete. The survey was administered either at the beginning of class or at the end at the discretion of the professor. As students completed the survey they were handed in to the proctor. Preliminary evaluation of all manipulation checks, inspection of correlations, and evaluation of data indicated no problems. As such, a broader sample of 191 students was gathered from freshmen, junior, and senior level classes within the College of Business at the same university. No students completed the survey more than once. Data analysis was conducted on each group of students, with no significant differences on the distribution of data. Further evaluation was done to see if the pilot study data differed in any significant way from the remaining data. As there were no significant differences in study outcomes between the pilot data and the remaining data, and as there were no changes made to the sampling procedure or instrument based on the pilot study, these samples were combined for the final analysis.

Surveys were compiled into groups consisting of the classes in which they were administered for purposes of data analysis. The total number of complete surveys received was 237 students in freshmen, junior, and senior level classes. The students participated voluntarily, and no extra credit or compensation was offered.

Data were input into SPSS for analysis and hypothesis testing. Exploratory data analysis was conducted to assure that data all were in the range anticipated. Correlations were developed for all study variables. Then, univariate analysis of variance was conducted using GLM on the dependent variable, Intention to interview, with fixed factors Letter of Reference (coded 0 for negative and 1 for positive) and Social Networking Self-Representation (coded 0 for negative and 1 for positive). Covariates included in the analysis included age, gender, GPA, major, months of full-time work experience, and whether the respondent had a social networking website. Cole et al. (2007) suggests controlling for these items due to potential bias on recruiter’s evaluation of applicants. The use of social networking websites is an important control as well as suggested by Peluchette and Karl (2008) such that it is clear that use of social networking websites may bias outcomes on the impact of the picture. In addition, since both prior research and this study proposed that perceived job qualifications would affect intention to interview, and since the job qualifications presented to each respondent were the same, respondents’ rating of the candidate’s perceived job qualifications were included as a covariate in the equation.
RESULTS

Demographic information was collected from the respondents on gender, age, major, work experience, grade point average, and whether or not the respondent had a social networking website. The sample consisted of approximately 61% men and 36% women. The mean age was 21.43 with a range between 17 and 36 years of age. The students reported majors were 9.6% accounting, 2.6% economics, 11.3% finance, 25.2% marketing, 21.3% management, 25.2% resort tourism management, and 4.8% other. The mean months of work experience was 28.42. The mean GPA is 3.156 on a 4.0 scale. Approximately 86% of the respondents indicated that they had a social networking web page.

A correlation matrix in Table 1 shows the relationships among study variables. The following correlations are statistically significant: Perceived Characteristics and Letter of Reference (r = .536, p < .001); Facebook and Perceived Characteristics (r = .329, p < .001); Intention to interview and Perceived Characteristics (r = .667, p < .001); Intention to Interview and Letter of Reference (r = .593, p < .001); Age and Gender (r = .283, p < .001); Full-time Work Experience and Age (r = .448, p < .001); Major and Age (r = .273, p < .001); GPA and Major (r = .252, p < .001); Intention to Interview and Perceived Qualifications (r = .206, p < .01); Full-time Work Experience and Gender (r = .187, p < .01); Major and Gender (r = .207, p < .01); GPA and Gender (r = .204, p < .01); Social Networking Website and Gender (r = .135; p < .01); Social Networking Site and Age (r = .216, p < .01); Social Networking Website and Full Time Work Experience (r = .219; p < .01). Those of most interest are the pairs containing Perceived Characteristics as well as those which contain Intent to Hire. It was expected that Intention to Interview and Perceived Characteristics would be correlated and would impact the potential action in the same direction as the Perceived Characteristics. Thus, Hypothesis 1 is initially supported with the positive and significant relationship between Perceived Job Qualifications and Intention to Interview (r = .206; p < .01).
### TABLE 1
Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perceived Job Qualifications</td>
<td>21.64</td>
<td>3.917</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Letter of Reference</td>
<td>0.51</td>
<td>0.501</td>
<td>-0.039</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Facebook</td>
<td>0.49</td>
<td>0.501</td>
<td>0.063</td>
<td>-0.004</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Intent to Interview</td>
<td>26.12</td>
<td>11.74</td>
<td>0.206**</td>
<td>0.593***</td>
<td>0.179**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gender</td>
<td>0.37</td>
<td>0.485</td>
<td>0.006</td>
<td>0.106</td>
<td>0.045</td>
<td>0.051</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Age</td>
<td>21.43</td>
<td>2.417</td>
<td>-0.018</td>
<td>-0.018</td>
<td>-0.013</td>
<td>0.008</td>
<td>0.283***</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Full Time Work (in months)</td>
<td>28.42</td>
<td>36.675</td>
<td>-0.040</td>
<td>0.001</td>
<td>-0.065</td>
<td>-0.034</td>
<td>-0.187**</td>
<td>0.448***</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Major</td>
<td>4.41</td>
<td>1.605</td>
<td>0.043</td>
<td>0.037</td>
<td>-0.002</td>
<td>0.099</td>
<td>0.207**</td>
<td>0.273***</td>
<td>-0.080</td>
<td>1.000</td>
</tr>
<tr>
<td>9</td>
<td>Grade Point Average</td>
<td>3.16</td>
<td>0.435</td>
<td>-0.035</td>
<td>0.013</td>
<td>0.014</td>
<td>-0.110</td>
<td>0.204**</td>
<td>-0.084</td>
<td>-0.021</td>
<td>0.252***</td>
</tr>
<tr>
<td></td>
<td>Social Networking Site?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10</td>
<td>0.11</td>
<td>0.32</td>
<td>-0.082</td>
<td>-0.035</td>
<td>0.149*</td>
<td>-0.092</td>
<td>-0.135**</td>
<td>0.216**</td>
<td>0.219**</td>
<td>-0.133*</td>
<td>-0.013</td>
</tr>
</tbody>
</table>

2 Tailed Significance: † p < .10; * p < .05; ** p < .01; *** p < .001.
Analysis of the univariate ANCOVA test was first evaluated for homogeneity of variances across groups using the Levene Statistic. Results indicated statistical significance (F=6.993; p< .05). Despite this violation of homogeneity of variances, the analysis proceeded, because it has been noted that ANOVA is relatively robust to violations of homogeneity of variances, especially when sample sizes are relatively even, which was the case in the present study. In addition, inspection of the Levene test statistics for individual groups on the dependent variable, indicated that the only instance of non-homogeneous variance within a group related to the relationship between Letter of Reference and Intention to Interview (p=.07). Thus, it was deemed appropriate to continue with the ANCOVA procedure. As Table 2 below shows, the overall ANCOVA test was significant (17.609; p < .001), with R-squared equivalent to .475 and Adjusted R-squared equal to .448. Thus, a significant proportion of the variance in Intention to Interview was explained by the variables included in the analysis. Significant relationships were noted for none of the control variables except Perceived Job Qualifications, as noted in Hypothesis 1 (F = 17.800; p < .001; beta = .678), supporting Hypothesis 1.

### TABLE 2
Results of ANCOVA on Intention to Interview

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>14091.509</td>
<td>10</td>
<td>1409.151</td>
<td>17.609</td>
<td>0.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>58.093</td>
<td>1</td>
<td>58.093</td>
<td>0.726</td>
<td>0.395</td>
</tr>
<tr>
<td>Gender</td>
<td>2.083</td>
<td>1</td>
<td>2.083</td>
<td>0.026</td>
<td>0.872</td>
</tr>
<tr>
<td>Age</td>
<td>109.426</td>
<td>1</td>
<td>109.426</td>
<td>1.367</td>
<td>0.244</td>
</tr>
<tr>
<td>Full-time Work Experience</td>
<td>15.934</td>
<td>1</td>
<td>15.934</td>
<td>0.199</td>
<td>0.656</td>
</tr>
<tr>
<td>Major</td>
<td>101.219</td>
<td>1</td>
<td>101.219</td>
<td>1.265</td>
<td>0.262</td>
</tr>
<tr>
<td>GPA</td>
<td>133.617</td>
<td>1</td>
<td>133.617</td>
<td>1.670</td>
<td>0.198</td>
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<tr>
<td>Member of Social Networking Site?</td>
<td>131.962</td>
<td>1</td>
<td>131.962</td>
<td>1.649</td>
<td>0.201</td>
</tr>
<tr>
<td>Perceived Qualifications</td>
<td>1424.479</td>
<td>1</td>
<td>1424.479</td>
<td>17.800</td>
<td>0.000</td>
</tr>
<tr>
<td>Letter of Reference (1=Positive)</td>
<td>10370.816</td>
<td>1</td>
<td>10370.816</td>
<td>129.59</td>
<td>0.000</td>
</tr>
<tr>
<td>Facebook Image (1=Positive)</td>
<td>877.903</td>
<td>1</td>
<td>877.903</td>
<td>10.97</td>
<td>0.001</td>
</tr>
<tr>
<td>Interaction (Letter of Reference x Facebook)</td>
<td>361.143</td>
<td>1</td>
<td>361.143</td>
<td>4.513</td>
<td>0.035</td>
</tr>
<tr>
<td>Error</td>
<td>15605.209</td>
<td>195</td>
<td>80.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>170308</td>
<td>206</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>29696.718</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Computed using alpha = .05
b R Squared = .475 (Adjusted R Squared = .448)
Hypothesis 2 suggested that more positive letters of reference would be positively associated with intention to interview. This hypothesis was supported ($F = 129.59; p < .001; \beta = -17.07$). Posthoc comparisons indicated that the mean intention to interview for those who reviewed a negative letter of reference were 18.946, while the mean intention to interview for those who reviewed a positive letter of reference was 33.316. This mean difference of 14.370 points was significant at $p < .001$, providing strong support for Hypothesis 2.

Hypothesis 3 suggested that perceived candidate self-representation of behaviors through social networking website information would be associated with intention to interview, with less positive self-depictions of behavior less positively associated with intent to hire. This hypothesis was strongly supported ($F = 10.970; p < .001; \beta = -6.925$). The mean intention to interview among those who reviewed the negative Facebook image was 24.017, while the mean intention to interview among those who reviewed the positive Facebook image was 28.245. This 4.228 difference was significant at $p = .001$, providing strong support for Hypothesis 3 and showing that negative self-depicted behavioral images on social networking websites is associated with a lower intention to interview than positive self-depicted behavioral images.

Hypothesis 5 predicted a partial moderation effect of social networking website information on the relationship between letters of reference and intention to interview, such that negative self-depictions of behavior on social networking websites would erode the image presented in letters of reference and thereby decrease intention to interview. This interactive relationship was significant in the ANCOVA ($F = 4.513; p = .035; \beta = 5.396$). The mean scores on intention to interview were as follows: negative letter of reference, negative Facebook image (mean = 18.181); negative letter of reference, positive Facebook image (mean = 19.711); positive letter of reference, negative Facebook image (mean = 29.853); positive letter of reference, positive Facebook image (mean = 36.779), with covariates set at mean values. Inspection of the 95% confidence intervals around each mean indicated that both the conditions with negative letters of reference were significantly lower in intention to interview than both conditions with positive letters of reference, and that positive letter of reference with a negative Facebook image was significantly lower on intention to interview than was the condition with a positive letter of reference and positive Facebook image. The marginal means profile plot is shown in Figure 2.

**FIGURE 2**
Marginal Means Plot of the Effect of Letter of Reference and Facebook Image on Intention to Interview
DISCUSSION

The study supports the findings of Tommasi et al. (1998), Templer and Thacker (2002) as they relate to the impact of conscious impression management through letters of reference. The study also extends the research literature unconscious impression management in the job application process by showing the significant effect that exposure to a single social networking self depiction had upon intentions to interview. Furthermore, the findings from this study that note the interactive effects of social networking site depictions upon evaluation by job screeners of applicants with otherwise very positive letters of reference is noteworthy. Impression management techniques, while typically used to positively influence individuals through resumé and positive letters of reference can also have negative outcomes in the form of negative letters of reference as well as information posted on social networking websites. The impression management can either be conscious by intentionally providing or asking that information be provided to an employer or unconscious when information is used which is initially intended for another purpose. Information technology development and active online social communities will most likely continue to blur the lines between personal and professional lives, and it is important for organizational researchers, management practitioners, and job applicants to better understand the impacts of this process.

Further research will need to validate the findings of this study, both with other student groups and more importantly within populations of hiring screeners. Preliminary outcomes seem to indicate, though, that presenting positive letters of reference is important to offset any additional information that may be presented to a hiring manager without the job candidate’s conscious awareness. Candidate’s should also realize that while they may feel their social networking websites are places to connect with friends and family, they should not feel comfortable placing potentially damaging images and information on their page, as it can be used for purposes other than what they intended. Clearly, employers are picking up on the fact that this information is available and can be used to get a glimpse of the “real person” behind the impression managed resumé and letters of reference. As more managers become familiar with social networking websites, the use of the information not only available to them through their own network will increase but the sheer knowledge about the existence of the information will increase. Privacy filters are one way to protect information, but “friends” are so plentiful and so connected that even with privacy filters information can be used by employers and others in ways it was not originally intended. Potential candidates should clean up their sites and could potentially use them as an impression management tool from a positive perspective by placing positive images, comments as well as reference professional affiliations. Constant monitoring of site pages is necessary in that those who have them cannot predict what can show up on their site by way of posted comments which not only include text but can include pictures as well.

Limitations of this study include the study group and population size. The group included only undergraduate students from one university in one area of the country which is not a sample indicative of all undergraduate students. These students were also only selected from the college of business. Though much research on hiring has been done in student populations, it is clearly also important to replicate this study within a hiring decision maker population to assess how consistent the results remain.
Despite the limitations noted, one might assume that college students would be the least influenced by seeing a negative Facebook image and extending the impression from that image to the characteristics of the job candidate. As such, one future question is to extend this study into a more diverse age population to identify whether Baby Boomers, Gen Xers, and WWII generation respond in a similar way to the social network site images, as they relate to job screening decision making. Other research might also explore varying types of social networking site images, and extend this research into international settings, because many of the social networking sites have clientele from around the world. It would be of interest to know whether the perceptions about social networking site usage by businesses is differently perceived, and whether the perceptions about the extension of the imputed characteristics from the social networking site image are similar across cultural, and age groups.

The preliminary findings of this research indicate a need to carefully monitor how the newer social networking sites affect organizational decision making. These sites are likely to become even more relevant in the future and are also platforms upon which individuals across nations and cultures interact. As such, the manner in which individuals portray themselves, both consciously and unconsciously, will most likely become even more relevant to the businesses within which they work or seek to work.

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THE EFFECTS OF A BINDING AND MANDATORY ARBITRATION PROGRAM ON EMPLOYEE ATTITUDES, PERFORMANCE AND TURNOVER

H. John Bernardin, Florida Atlantic University
Brenda E. Richey, Florida Atlantic University
Jennifer M. Collins, Florida A & M University

ABSTRACT

The effects of the imposition of a binding and mandatory arbitration dispute resolution program on current employees were studied in a retail environment. The key criteria under study were: Employee perceptions of trust, procedural justice, job satisfaction, intentions to stay, job performance, including organizational citizenship behavior, and voluntary turnover. In comparisons to control data from equivalent employee samples who worked under an alternative approach to dispute resolution, results revealed no significant negative effects related to the imposition of the binding and mandatory arbitration program on any of the key employee variables. In addition, we found no significant interactive effects for the binding and mandatory ADR program based on the demographic characteristics of the employees under study. Despite published research indicating potential problems for employers imposing this program on current employees, we found no strong evidence to support these predictions.

During the past 20 years, the United States has seen a dramatic increase in the use of alternative dispute resolution (ADR) programs to resolve workplace disputes (Seeber & Lipsky, 2006). For employers, this privatization of the process holds substantial promise. The outlook for employees is less certain, and so their attitudes toward various ADR program characteristics may be more mixed. Although there has been substantial recent research into many aspects of ADR programs (Bales, 2006; Colvin, 2007; Mahony & Klass, 2008; Mahony, Klass, McClendon & Varma, 2005; Seeber & Lipsky, 2006) one critical question that remains unanswered is what happens when an employer imposes a particular ADR program on an existing workforce. Of particular interest are the effects of the most common type of newly imposed ADR program, a mandatory mediation and binding arbitration program (hereafter, MMBA) that precludes an employee’s ability to litigate most employment disputes, including EEO claims. The purpose of this study is to examine the effects of the imposition of such a program on the attitudes, performance and intentions of employees who were affected by this change in HR policy.

Employers have rushed to adopt MMBA programs because, compared to courts, dispute resolution in these forums is cheap and fast (Mahony et al. 2005). Employees can also benefit from these attributes, and because these forums are less expensive they may actually broaden access for employees to pursue employment disputes (Mahony & Klass, 2008). The evidence of whether the forum affects the “win rate” is less clear. The argument that arbitration can be a “stacked deck” when the employer comes to the table as a repeat player has been refuted in some studies of outcomes that find employees actually win more cases in these forums (Colvin, 2007). Information on outcomes resulting from settlements prior to trial is difficult to find, so whether either forum routinely favors one party is
unclear.

Concerns about employee rights present more of an issue in the case of mandatory and binding arbitration agreements, particularly those imposed as a condition of employment. As Mahony and Klass note, “these are contracts of adhesion.” Formed without employee input, in some cases they “can, in perception if not substance, be unfairly tilted against employees.” (Mahony & Klass, 2008, p. 256) The extent to which procedural protections are required in these agreements has also not been fully resolved (Seeber & Lipsky, 2006). Under these agreements, employees waive their traditional right to proceed to court if they are otherwise unable to resolve workplace conflicts. When the program is imposed on an existing work force, the change may be perceived as a breach of the psychological contract by existing employees and could affect employee attitudes, job performance and intentions regarding future actions (Mahony et al., 2005; Rousseau, 1995; Zhao, Wayne, Glibkowski and Bravo, 2007). These concerns become more important as the imposition and use of mandatory arbitration becomes more widespread. Colvin (2007) estimates that between 15% and 25% of US employers have adopted some form of arbitration program. Although as many as 25% of arbitration programs may be voluntary (Mahony et al. 2005), “most employer-promulgated arbitration agreements are mandatory, and the decisions are final and binding” (Mahony & Klass, 2008, p. 256).

The limited research on reactions to MMBA indicate potential trouble for employers. In a series of studies, Richey, Bernardin, Tyler and McKinney (2001) found that undergraduate students role-playing as job applicants were less likely to pursue employment opportunities when considering a MMBA policy as a condition of employment. Mahony et al. (2005) reached a similar conclusion in exploring the responses of working adults enrolled in MBA and university executive programs. These studies also found respondent ethnicity had significant main effects (Mahony et al., 2005) or moderating interactions (Richey et al, 2001), with minority respondents less attracted to companies with MMBA programs. However, as noted above, the Richey et al. and Mahony et al. studies measured the attitudes of student respondents and looked at the reactions of students who were role-playing as job applicants. Of course, student proxies may not reflect the concerns of actual job applicants or current employees (Sinclair, Martin & Michel, 1999; Wagstaff, 1997). Additionally, the methods used in these studies may be considered “somewhat artificial in that it is unlikely that a potential employer would have given such prominence to an employment arbitration procedure in an employment brochure…” (Colvin, 2007, p.444). For this reason, both Mahony et al. (2005) and Richey et al. (2001) called for research on the effects of ADR options, and especially binding and mandatory arbitration, on actual job applicants and current employees. No published studies to date have considered either the attitudes and/or the reactions of incumbent employees toward ADR program options either under consideration by their employers or after the installation of such a program. Research related to psychological contract breach suggests that the imposition of such a policy could have a strong negative effect on employees who may perceive an imposed MMBA policy as less procedurally just than the more traditional approaches to dispute resolution. Previous research on contract breach indicates strong negative effects on attitudes, behavior, performance and voluntary turnover (Zhao et al., 2007).

Bernardin, Richey and Castro (2009) investigated the effects of hypothetical alternative dispute resolution (ADR) policies in one organization. Employees’ perceptions of the fairness, trust and their turnover intentions as a function of ADR program characteristics were assessed. Compared to other
options for ADR, the MMBA program resulted in significantly lower levels of procedural fairness perception, organizational trust and intentions to stay. A second study reported by Bernardin et al. (2009) investigated the effects of the imposed (and identical) MMBA program on job applicant flow data and found no significant deleterious effects related to the requirement that job candidates stipulate their understanding of, and agreement to abide by the conditions of the MMBA program as a condition for employment consideration. Job applicants for key positions who had to agree to the MMBA were just as likely to continue in the employment process and to accept jobs offers as other applicants who did not have to agree to the MMBA program. Bernardin et al. (2009) emphasized that the effects of the MMBA could be much more onerous when current employees are affected by the change in policy since this could be perceived as a breach in the psychological contract.

The primary purpose of this study was to determine if the imposition of a mandatory and binding ADR program had a negative effect on current employees who had previously worked under an alternative approach to dispute resolution. We examined the effects of a new MMBA program on employee justice and organizational trust perceptions, intentions to stay with the organization, voluntary turnover, and employee performance. We also examined the possible interactive effects of employee demographic characteristics on these same dependent variables. Like Bernardin et al. (2009), this study responds to Mahoney et al.’s call for research related to ADR on actual job incumbents and is responsive to Greenberg and Lind’s (2000) compelling argument for an increase in the practical value of organizational justice studies directed at actual personnel policy issues such as ADR programs.

Research and theory indicates that the imposition of a MMBA program could have a more deleterious effect on current employees’ attitudes and their intentions because of a breach in an implicit understanding regarding dispute resolution. The imposition of such a program could invoke a stronger negative reaction in current employees, compared to job candidates, which is then manifested in attitudinal and behavioral changes, performance decrements and perhaps increases in voluntary turnover (Zhao et al. 2007). Olson-Buchanan and Boswell (2008) argued that there is a process through which a “triggering event” may be translated into recognition of mistreatment and behavioral responses. In the case of the imposition of a MMBA, there may be a similar process that must take place before a perceived injustice is translated into a breach sufficient to lead to changes in employee behavior. Zhao et al. (2007) recognize the distinction between recognizing a breach and the effective reaction to the breach. To explore this further, it would be useful to know if the imposition of a MMBA program resulted in decrements in performance, more active unionization efforts or higher voluntary turnover rates, irrespective of whether employees found the program unfair. Among these negative outcomes could also be a decrease in intended or manifested discretionary extra-role or organizational citizenship behaviors where the employee supposedly goes “above and beyond” the call of duty to serve his/her work unit, co-workers and/or the organization (Van Dyne & LePine, 1998).

Previous research from Richey et al. (2001) and Mahoney et al. (2005) also indicated that reactions to a MMBA program could vary as a function of the employee’s race or ethnicity. We explore these possible effects as well using personnel data and results from two corporate-wide HR programs; the annual employee survey and a multi-rater performance appraisal system. Research on breach and work attitudes in addition to the previous work on the possible reactions to the imposition of a MMBA program leads to the following hypotheses on the effects of the imposition of a MMBA program on
current employees:

H1. Trust in the organization will be lower for employees under the MMBA program compared to trust levels from employees not working under MMBA;
H2. Perceptions of procedural justice will be lower under the MMBA program;
H3. The imposition of a MMBA program will lower the job satisfaction of employees;
H4. The imposition of a MMBA program will lower intentions to stay with the organization;
H5. Performance will be lower for employees affected by the MMBA; and,
H6. Self-reported ratings of the likelihood of organizational citizenship behavior will be lower from employees working under a MMBA; and,
H7. Voluntary turnover will be higher for the region after imposition of the MMBA.

We tested Hypotheses 1-4 in Study I by analyzing data from an annual employee survey and then investigated Hypotheses 5-6 in Study II using data from a multi-rater performance appraisal system collected before and after the MMBA program was installed. We tested H7 using employee termination/status data for the relevant period of time. In addition, we analyzed the results of exit interviews with employees who had terminated employment with the company. The “control” data for both studies is described next.

**METHODS FOR STUDIES I AND II**

The company under study was the same Fortune 200 retailer described inBernardin et al. (2009). The U.S. stores are located in four regions each of which has approximately the same number of stores. We tested the hypotheses regarding the effects of the MMBA program on employees by comparing data from the following: 1. Employees who occupied the same 24 key job titles in the MMBA Region for at least six months prior to (Time 1) and one year after (Time 2) the imposition of the MMBA program in one region of the company; and 2. Employees occupying the same jobs in a Control Region (hereafter referred to as CR and described below) during the identical two time periods. All of the job titles studied here involved jobs that required a minimum of a college degree or previous managerial experience and were classified as “key” jobs for the two regions. Most of these jobs were in the management, marketing and accounting job families.

We were given access to data from the CR that had not adopted the new MMBA policy nor implemented any other major change in corporate policy during the periods of study. The CR was considered by the company to be the most similar to the MMBA Region on all critical criteria that could be considered as reasonable alternative explanatory variables for differences in employee reactions and outcomes. First, for these 24 key jobs and over a two year period immediately prior to the data collection periods, the regions had historically comparable levels of store performance and profitability measures, voluntary turnover rates and comparable levels of employee rated job performance. In addition, there were no significant differences (p>.20) between the regions on any affective measures (viz., job satisfaction, perceptions of fairness and trust, and intentions to remain with the company) for the same job titles/ families. This comparability also applied when race/ethnicity, gender and applicant age was considered. In addition, the unemployment rates for the two regions under study were similar and stable across the relevant period of data collection.1
All data were collected in the context of the company-wide voluntary affirmative action/diversity program. Data from Study I was derived from the annual employee survey conducted approximately six months before and six months after the installation of the new MMBA program. Data from Study II was derived from an on-line multi-rater performance appraisal that was conducted approximately one year before and one year after the installation of the MMBA system and company employee status records (i.e., turnover data) for the period one year before and one year after the installation of the MMBA. There were no differences in the manner in which any of the data were collected across the two corporate regions and the time periods for data collection. According to the company’s HR Vice-President, the two regions under study had been routinely compared when the company had done other empirical tests of company policy, programs, products, services, marketing and other strategies.

**Dispute Resolution Policies Under Study**

The two regions under study differed in terms of the dispute resolution policy that was installed at the start of what we describe as Time 2. Thus, the MMBA-Time 2 data are the focus of the hypotheses testing. Prior to the imposition of the MMBA in one region, at the start of Time 2, all full-time employees of the company worked under the identical “Open Door Policy” that called for resolving issues through the chain of command. Disputes were first raised with the immediate supervisor. Employees who were not satisfied at this stage could proceed to the next level. This policy was described in the employee handbook, distributed to all employees, and was available on the company Intranet site. Employees had the right to proceed to court if not satisfied with the outcome (for more detail, see Le Flanchec & Rojot, 2009). Previous survey results and other data related to this ADR policy were uniformly positive across the company.

In addition to the “Open Door Policy,” employees from the MMBA Region, commencing at the start of Time 2, were informed via e-mail of the installation of the MMBA program. These employees received the same initial information from the company website and employee handbook regarding the “Open Door Policy” but these sources also introduced the new MMBA policy (known as the “Mediation and Arbitration Procedural Agreement”). The company website stated: “For serious legal disputes that cannot be resolved through the “Open Door” Policy, we use our “Mediation and Arbitration Procedural Agreement” and rely on the experience and objectivity of the American Arbitration Association (AAA). Review this document in the Employee Handbook or click on the link below. Founded in 1926, the AAA helps businesses, associations, and all levels of government resolve disputes. If you fail to resolve your dispute through the ‘Open Door Policy,’ the AAA will then attempt to resolve the dispute through mediation. This neutral body or mediator will listen to both sides of the story and help you work it out together. For the use of AAA, you will pay a $50 processing fee. If you fail to resolve the dispute through mediation, your dispute will then be presented to the AAA for binding arbitration. The AAA arbitrator will decide your case after hearing arguments from both sides. You will have an opportunity to participate in the selection of the arbitrator. With arbitration, the decision is final and binding.”
STUDY I: THE EFFECTS OF THE IMPOSITION OF A MMBA ON EMPLOYEE TRUST, PERCEIVED FAIRNESS, SATISFACTION AND TURNOVER INTENTIONS

Participants and Procedure

The participants were employees from the same company, all of whom completed the annual on-line employee survey across two time periods. (See Table 1 for sample sizes). Two sample groups worked in the region where the MMBA program was installed and data were collected six months prior to (Time 1) and six months after the installment of the MMBA program. Two other groups of employees worked for the CR and provided data simultaneous with the two data collections from the MMBA region. Employees in the MMBA region Time 2 data samples had all worked at least six months within one of the regions. At Time 2, an additional sample of employees (N= 74) who were working under the newly imposed MMBA program were asked to complete the survey measure regarding justice, trust, job satisfaction and intentions after they had reviewed the MMBA program, given an electronic link and instructed to review the program before making their responses.

Dependent Variables

Participants from all groups except the MMBA group at Time 2 evaluated the procedural justice/fairness of the “Open Door” dispute resolution policy and then rated their level of trust in the organization, their job satisfaction and their intentions to stay with the company. Items on procedural justice/ fairness and trust were taken from published research on the same variables (Konovsky & Cropanzano, 1991; Tyler, 1989) and had been used as a part of the annual employee survey for several years. All scales were based on the average response to items measured using a five-point scale of agreement (SD-SA) and coded such that a high score indicated a high level of the measure under study.

To establish the equivalence of the regions on the key dependent variables prior to the installation of the MMBA program, we compared the level of each dependent variable from the MMBA region Time 1 sample to the respective levels from the CR Time 1 sample, the CR Time 2 sample and a combined (Time 1 and Time 2) CR sample. This test was performed for each dependent variable (i.e., trust, PJ, satisfaction, intentions to stay) and no significant differences were found (p>.15).

Perceptions of Trust

The employees’ levels of trust in their organization were measured with the same items for all four sample groups. Both pre and post MMBA-intervention trust was taken as a composite constructed using three items with alphas ranging from .83 to .89 for the four groups. The items were: “I trust management at this organization,” “I trust this organization to do the right thing for its employees,” and “I have a high level of trust in dealing with this organization.” The equivalency tests described above revealed no significant differences (p>.20) in levels of trust between the MMBA region Time 1 and the CRs.

Perceptions of fairness/Procedural Justice (PJ)

Employees’ perceptions of the fairness of the company-wide ADR policy (viz., the “Open Door Policy” for three of the groups) was measured using the mean of the following three items: “The
procedures for dispute resolution are fair to all parties,” “The open door policy is fair” and “The procedures for settling disputes are fair.” Alphas ranged from .87 to .92 for the four groups. These direct measures of procedural justice had been used by the company as a part of its annual employee survey for many years. For the MMBA group, respondents were asked the same questions except that “open door” policy was replaced by the “ADR” policy. Again, the equivalency test revealed no significant differences in levels of PJ between MMBA region at Time 1 and the CRs (p>.20).

Job Satisfaction
We measured overall satisfaction using the mean of three items (alphas ranging from .85-.93). Employees were asked to indicate their agreement with three statements: “This is a great place to work,” “I feel that this is a good organization,” and ‘Considering everything, I am satisfied with my job.” These items had been used by the company as a part of their annual survey for over 20 years. The equivalency tests again revealed no significant differences. Job satisfaction levels between the MMBA region Time 1 were comparable with those from the CR samples (p>.15).

Intentions to Stay
Employees’ intention to stay or leave the company was also measured before and after the MMBA program was installed. The question: “I intend to work for this company for a long time” was also part of the survey for all regions and time periods. Again, comparative tests to establish group equivalency on intentions to stay were also non-significant (p>.20).

We also focused our equivalency analyses regarding intentions to stay on older and (self-reported) higher performers, particularly for job titles regarded as relatively more important for the organization. Obviously, intentions to stay is correlated to some extent with the age and job tenure of the respondent. However, when we focused on those respondents who self-reported as high performers and that they were 40 years of age (or older), we also found no significant differences in intentions to stay for all comparisons that were made to establish group equivalency using all job titles and then by focusing on only the “core” job titles considered to be most important for the organization (regardless of regional assignment).

Control variables
Self-reported age, gender, ethnicity and the number of years working for the organization (organizational tenure) were requested for all regions and time periods. Age and tenure were measured as ordinal variables, as follows: age (1 = <21 years old; 2 = 21-30; 3 = 31-39; 4 = 40-49; 5 = 50 and older); tenure (1 = < 1 year with the company; 2 = 1-3 years; 3 = 3-5 years; 4 = 5-10 years; 5 = > 10 years with the company). Gender was coded as a nominal dichotomy 1 = female, 0 = male; ethnicity was coded pursuant to recommendations from the Equal Employment Opportunity Commission. There were no significant differences among the groups under study on any of these variables except for the expected “age” and “tenure” effects as a function of the time for data collections (i.e., longer tenure indicated by respondents at Time 2).
Results and Discussion

Across the four groups, the average age of participants was 34.1 years at Time 1 (SD = 8.1) and 34.8 (SD=7.4) at Time 2. There were no significant differences among the four groups as a function of gender and race/ethnicity; 51% of the respondents were women; 43% identified themselves as White, 18% indicated African-American, and 24% indicated Hispanic. The average tenure among the respondents was 5.3 years (SD = 3.1) for Time 1 and 5.7 (SD=3.5) at Time 2. The demographic characteristics volunteered by the samples of participants were a close approximation (and not significantly different) to the population demographics for the regions under study. The extrapolated rate of reported usage of the “Open Door” program did not differ across groups and was a close approximation to the rate maintained by the Human Resources Department for formal use of the policy. The extrapolated rate of reported usage of the MMBA program was also a close approximation to the rate maintained by the Human Resources Department for formal use of the new policy.

Table 1 presents descriptive statistics on employee perceptions of trust, perceptual justice, job satisfaction and intentions to stay for the four data blocks.
TABLE 1
Mean Ratings, Standard Deviations and ANOVA for Perceptions of Trust, PJ, Satisfaction and Intentions to Stay

<table>
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<tr>
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<th>M</th>
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<tr>
<td>2. CR-Time 2</td>
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<td>1.12</td>
<td>1.14</td>
<td>.96</td>
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<td>.20</td>
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We tested Hypothesis 1 (viz., trust in the organization will be lower for employees where a MMBA program is imposed) by first comparing mean levels of Trust from the MMBA region at Time 1 to those at Time 2, and by then comparing trust levels from MMBA region at Time 2 to trust levels from CR at Time 2. For these comparisons, we first compared mean “trust” levels but did not include the data from the sample of respondents who were asked to review the MMBA program and given specific questions about the program. We found no significant differences in trust levels when comparing the MMBA group with the other three groups. When we focused on only those respondents from the MMBA group who first reviewed and then made their “trust” ratings, we also found no significant differences as function of group.

We used an alternative and more statistically powerful method for analyzing a priori ordinal interactions (Bobko, 1986). Because a one-way ANOVA indicated the mean trust levels for the two CR time periods and the pre-MMBA block means were equivalent (p > .20), we proceeded to a two-group comparison using a t-test. This t-test for testing Hypothesis 1 was also not statistically significant; thus indicating that the MMBA region did not reduce the level of trust in the organization. Thus, there was no evidence of a significant decrease in the level of organizational trust among employees who were obliged to abide by a MMBA program.

Hypothesis 2 predicted that perceptions of the procedural justice and fairness of the dispute resolution process will be significantly lower under the MMBA program. Using the mean rating for PJ, we again found no differences in levels of PJ when comparing the perceptions of PJ from the MMBA group versus the other groups. Using the more powerful analysis described above, we also found no evidence of a significant decrease in the level of PJ among employees who were obliged to abide by a MMBA program for dispute resolution.

When we focused on only those respondents from the MMBA group who first reviewed and then made their “justice” ratings, we found significantly lower levels of PJ from the group who were first asked to review the MMBA. We found that these differences were manifest across all three of the items defining PJ. For all comparisons involving the “reviewing” post-MMBA regional respondents versus other groups, there was significantly lower PJ reported from the respondents who were asked to review the details of the program.

The most direct test of the perceived procedural justice of the MMBA program versus the “Open Door” approach was to isolate on the responses of those who indicated on the survey that they had actually used one (or both) of the ADR programs. Although the number of survey respondents who indicated that they had used an ADR program was only 1.6% of all survey respondents, when we compared the PJ ratings focused on the “Open Door” policy versus the actual experience with the use of the MMBA program, we found no significant differences in PJ as a function of the ADR program in place. However, after one year, only 11 individuals reported that they had actually used the MMBA program to settle a dispute.

Hypothesis 3 predicted that the imposition of a MMBA program would lower the job satisfaction of employees. Using the mean measure of satisfaction, we once again found no significant differences in satisfaction as a function of group. There was no decrease in job satisfaction for the MMBA group in comparisons to the pre-MMBA levels for the same region or in the comparison to the “control” region where job satisfaction data were collected at the same time. When we focused on only
those respondents from the MMBA group who first reviewed and then made their “satisfaction” ratings, we also found no significant differences as a function of group.

Hypothesis 4 predicted that intentions to stay with the organization would be lower subsequent to the imposition of a MMBA compared to the control groups. Again, our mean comparisons between the MMBA group and our “control” group data blocks revealed no significant differences between groups. When we focused our analyses on only those respondents from the MMBA group who first reviewed and then made their “intentions” ratings, we also found no significant differences as a function of group. Again, using the more powerful analysis described above, we also found no evidence of a significant decrease in the level of job satisfaction among employees who were obliged to abide by a MMBA program for dispute resolution.

The Role of Respondent Demographics in Reactions to the MMBA

We also investigated the potential moderating role of ethnicity, gender and age/tenure on reactions to the MMBA. While ethnicity was related to the perceived fairness of both the “open door” and the MMBA program (i.e., African-Americans regarded both programs as less fair compared to others), no demographic variable interacted with ADR policy in reactions to the MMBA, regardless of the dependent variable under study. Minorities, women and more senior employees were not less likely to stay with the organization after the imposition of the MMBA program.

Effects as a Function of Self-Reported Employee Performance level

Since the annual survey asked employees to report their last performance appraisal, we also investigated the extent to which employees who self-reported higher levels of performance would be more likely to be negatively affected by the imposition of the MMBA policy. We found no such evidence to support this proposition regardless of the dependent variable under study. While not statistically significant, employees who self-reported a relatively higher level of rated performance actually rated the MMBA more positively than employees who self-reported less favorable performance appraisals. This finding was also replicated when we focused our analyses on high performers who occupied relatively more important positions within the organization and when we analyzed those high performing respondents who were asked to review the MMBA program before they made their ratings.

Summary of Study I Results

Contrary to expectations based on the findings of Bernardin et al. (2009), Mahony et al. (2005) and other research, we found very little evidence that the imposition of a MMBA program had a deleterious effect on employee attitudes or intentions to stay with the company. The survey respondents from the MMBA group did not report significantly lower levels of trust in the organization, lower levels of job satisfaction or intentions to stay with the company. We also found no evidence of negative effects from the MMBA program when we focused on high performers or when we analyzed data as a function of respondent gender, ethnicity, age or tenure. Although African-Americans regarded both the “Open Door” policy and the MMBA program as less fair than other employees, their reaction to the new MMBA program was not significantly different from their attitudes toward the “Open Door” policy.

One provocative finding was that the sample of employees who were asked to review the new MMBA policy under which they were working prior to making their judgments of trust, justice,
satisfaction and intentions, and who were provided a link describing the program in detail, reported lower PJ ratings of the MMBA program compared to all other respondent groups who were simply asked to assess the company’s ADR policy. This finding held when comparing the reviewing group to another group who were actually working with this specific program in effect but who were perhaps not fully aware of the details of the program despite receiving a full disclosure six months earlier prior to the imposition of the program. Thus, participants who were encouraged to review the new MMBA program prior to evaluating it tended to be more negative about the fairness of the program. Importantly, we did not find that this lower PJ rating translated into significantly lower levels of trust, satisfaction or intentions to stay with the company. These findings were replicated when we focused on responses of those minorities who were asked to review the MMBA program prior to making their judgments and when we focused on older white males. We also found that the 11 individuals who reported an actual experience with the MMBA reported lower mean levels of PJ but not significantly different from the levels of PJ reported for the “Open Door” policy. We hasten to point out, however, that other employees who had actual experience with the MMBA may have left the company either voluntarily or as a part of the arbitrators’ final decision. More research is clearly needed on the actual experiences, outcomes and costs of the MMBA.

STUDY II: THE EFFECTS OF THE IMPOSITION OF A MMBA PROGRAM ON EMPLOYEE PERFORMANCE, ORGANIZATIONAL CITIZENSHIP BEHAVIOR, AND TURNOVER

We tested Hypotheses 5 -7 using data from the company’s Human Resource Information System that included the results of a multi-rater appraisal system and information related to employee status. Our focus was on the same two years of data; i.e., the year prior to the installation of the MMBA program in one region and data collected subsequent to the installation of the MMBA.

Sample

We had access to all performance appraisal and turnover data from the same two regions described above for the same two year period of Study I. Again, we were then able to test our hypotheses by comparing pre and post MMBA performance and turnover data from the same region and also data derived from the identical time periods from the CR described in Study I.

We first determined sample equivalency/comparability on the dependent variables under study in Study II for the groups of data (i.e., data from two regions across two time periods) and for all critical variables that we believed to be related to the hypotheses and dependent variables under study. Thus, for the Time 1 data, we established that there were no significant differences (p.>20) between the CR region and the pre-MMBA region on any of the following variables: 1. multirater mean ratings on managers and associate managers as a function of each rating source (i.e., self, subordinate, customer, supervisor and peer), and rating competency (including Organizational Citizenship Behavior (OCB)); 2. Supervisory ratings of 919 non-exempt personnel analyzed at both the competency and aggregated level (including OCB factors); 3. Anticipated OCB self- ratings; 4. Turnover data for the two regions (including rates of voluntary termination and indicated reasons for the termination) for 24 “core” positions; and 5. Demographic data on all rated personnel classified by gender, age, ethnicity, and years of service.
Based on these comparisons, as in Study I, we concluded that the two regions under study were equivalent at Time 1 (pre-MMBA) and that therefore data comparisons between the post-MMBA region and CR data from the same time periods allowed us to draw inferences regarding the effects of the implementation of the MMBA program on performance and turnover. In addition, we tested our hypotheses by comparing pre and post MMBA data from the same region.

**Measures/Instruments**

The multirater competency rating system for managers has been described in detail elsewhere (Hagan, Konopaske, Bernardin & Tyler, 2006). The competencies were developed as a part of a study of all retail store management jobs and succession planning at the company. Six competencies were identified as “core” or “generalizable” competencies such that each was judged to be a critical and independent underlying competency for successful performance at the managerial level. These competencies were judged to be important for and representative of relatively stable and important work activities for retail management jobs within the organization. There were no significant differences in importance ratings or rankings on the competencies as a function of the two regions under study here. All core competency ratings were made on seven-point, behavioral expectation scales.

The purpose of the multirater competency appraisal system (across all regions) was to provide feedback for managers and, in aggregated form, as one basis for evaluating the effectiveness of various staffing and recruiting methods within the company. Participants were also informed that the multirater process might ultimately be used as one basis for making staffing decisions in the future and that they would be asked for feedback concerning the process. Ratings by managers, their subordinates, peers, and supervisors were completed in both regions under study approximately six months prior to the implementation of the MMBA program in one region and six months after the MMBA installation.

In addition to the “core” competency ratings, all raters were also given an opportunity to rate a manager’s extra-role or OCBs. The OCBs for this study were a close match to those described in previous research related to OCB (e.g., Organ & Konovsky, 1989; Organ & Ryan, 1995; Van Dyne & LePine, 1998). Specifically, raters were asked to indicate on a seven-point scale of intensity (1=strongly disagree; 7=strongly agree) whether the manager: 1. “volunteered to help others get their work done;” 2. “went above and beyond the call of duty to meet objectives;” 3. “assisted others to meet all unit objectives,” and 4. “did everything that was needed to meet or exceed corporate objectives.” In addition, when managers made their self-assessments, they were also asked to indicate the likelihood that, in the future, they would behave in the manner described in each of the four statements.

We also had access to self and supervisory performance appraisals for all full-time, non-exempt personnel. Employees submitted self-assessments as a part of the formal, and administratively significant, performance appraisal process. The ratings of both “in-role” and “extra-role” (or OCBs) performance were made on the identical seven-point scale described above but the “in-role” items differed as a function of the particular ratee’s job description. All employees did a self-summary rating and were rated using a summary rating of overall performance effectiveness. The four “extra-role” items rated were identical to those described above for managers.

We also retrieved turnover/retention data for the two years under study for the two regions (one year prior to implementation of the MMBA and the full year after implementation). We focused on 24 “core” positions for the regions. The Human Resource Information System included reasons for the
termination and allowed for specific detail on the reasons for termination. Opportunity was available for a supervisor or human resource consultant to stipulate a particular reason for a termination, including objections to an HR policy such as MMBA. An HR manager typically conducted an exit interview with employees who were terminating employment and then entered the reasons(s) for termination into the HRIS.

Results

Table 2 presents the descriptive statistics and mean comparisons for the aggregated (across sources and dimensions) rating data for the four groups. The appraisal data reported in Table 2 for the non-exempt personnel is from the summary rating (across all core job titles). To test the hypotheses, the critical comparisons involved the Time 2 (post-MMBA) mean ratings for the affected employees versus the “equivalent” means from the other three data blocks.
TABLE 2
Descriptive Statistics on Multi-Rater Competency Ratings and Self and Other Organizational Citizenship Behaviors

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Multi-Rater Competency Ratings

1. CR-Time 1 5.13 1.28 139
2. CR-Time 2 5.29 1.20 132 1.33
3. Pre-MMBA-Time 1 5.19 1.37 137 1.29 1.18
4. Post-MMBA-Time 2 5.30 1.31 143 1.43 1.31 1.41
TOTAL 5.25 1.32 551 1.58

Anticipated OCBs (Self)

1. CR-Time 1 5.21 1.23 138
2. CR-Time 2 5.29 1.52 131 0.97
3. Pre-MMBA-Time 1 5.20 1.41 147 1.20 1.12
4. Post-MMBA-Time 2 5.03 1.20 139 1.57 1.32 1.49
TOTAL 5.27 1.46 555 1.56

Rated OCBs

1. CR-Time 5.22 1.01 137
2. CR-Time 5.17 1.15 132 1.16
3. Pre-MMBA-Time 1 5.31 1.22 147 1.21 1.31
4. Post-MMBA-Time 2 5.14 1.09 140 1.30 1.50 1.05
| TOTAL | 5.19 | 1.42 | 556 | 1.26 |

1 The average unemployment rates for the two regions for the two years preceding Time 1 were 4.7 and 4.8 for the MMBR region and the Control Region respectively while the averages for Time 1 were 4.8 and 5.1 and 4.7 and 4.7 and 4.8 for Time 2, respectively.
A comparison of means on the multirater appraisal data (across sources), the OCB data (both assessed and anticipated), the nonexempt appraisal data and all pertinent turnover data revealed no pattern of deleterious outcomes for the group directly affected by the MMBA program. Both managerial and non-exempt performance appraisal data were slightly elevated at Time 2 compared to Time 1 as is common for appraisal system data over time. This elevation occurred for both regions.

Hypothesis 5 predicted that performance would be lower for employees affected by the MMBA compared to CR data. We tested this hypothesis by first comparing the same region’s pre and post-MMBA performance appraisal data derived from the multirater appraisal program for managers and also from the supervisory appraisals of the non-exempt personnel. In both cases, and regardless of the source of the rating data, we did not find a significant decrease in performance appraisals for those directly affected by the MMBA program. In fact, as stated, ratings from peers and supervisors were actually higher in this region after the MMBA program had been implemented compared to data from the same region, using the same rating sources and with appraisals collected about six months prior to the implementation of the MMBA.

There were no significant differences in the managerial multi-rater appraisal data, regardless of source, or the supervisory data when comparing the post-MMBA ratings with the CR data (collected at the same time). As with the MMBA region, mean levels of both the multi-rater and the supervisory appraisal ratings were significantly higher at Time 2 for the “control” region. We also found no significant differences in OCB ratings, regardless of rating source, when we compared these ratings from the post-MMBA region to other appropriately comparable data. Thus, regarding self, subordinate, peer and supervisory assessments of past OCBs, there was no decrease in these extra-role behaviors (as rated) as a function of the organization’s decision to implement the MMBA program. As with the other appraisal data, although not statistically significant, OCB ratings collected subsequent to implementation of the MMBA were slightly elevated compared to ratings on the same items collected on the same personnel one year earlier and approximately six months prior to installation of the MMBA.

Demographic Variables and the Effects of the MMBA

We also examined the possible interactive effects of demographic variables on performance as a function of the installation of the MMBA program. We examined the effects of ratee ethnicity, gender and age to determine if perhaps those most potentially (at least psychologically) affected by the new MMBA program would have the most negative reactions to it. Again, we found no such effects when we looked at the rated performance, including OCB ratings, of minorities, women or older workers as a function of the installation of a MMBA program.

Hypothesis 6 predicted that the self-assessments of the likelihood of future organizational citizenship behaviors would be lower after imposition of the MMBA compared to anticipatory OCB behaviors prior to the implementation of the MMBA from the same region and self-rated, anticipatory OCB from employees who worked under the “Open door” policy. Once again, there was no indication that employees who were directly affected by the change in corporate policy to a MMBA program would be less likely to perform extra-role behaviors in the future as a reaction to or as a consequence of the new MMBA policy. The likelihood of performing OCBs was not significantly different for employees affected by the MMBA in comparisons to the same individuals prior to the MMBA program and when compared to the CR data collected at the same time.
We also examined the possible interactive effects of demographic variables on anticipated OCBs as a function of the installation of the MMBA program. We studied the effects of ratee ethnicity, gender and age to determine if perhaps those individuals most potentially affected by the new ADR policy would be more likely to report an anticipated reduction or cessation in future extra-role or OCBs. As above, we again found no significant anticipatory OCB effects as a function of the imposition of the MMBA program from minorities, women or older workers.

Hypothesis 7 predicted that voluntary turnover would be higher for the region affected by the imposition of the MMBA program. To test this hypothesis, we first compared voluntary turnover rates for the year prior to the implementation of the MMBA with the year after implementation of the program from the same region. Through the company’s HRIS, we had access to employee records that classified each employee’s employment status for any given year, and, if applicable, specific reasons for a termination. The classifications included voluntary termination with a reason for the termination recorded.

Using Fisher Exact Tests (Agresti, 1992) to compare the proportion of voluntary turnover, we found no significant differences in the turnover rates for the two time periods and for the classifications of the causes for any particular termination, including an “other” category where specific reasons were occasionally (less than 5% of the time) reported. There were no recorded instances where the specific reason provided by the terminating employee concerned the MMBA program.

We also compared turnover rates from the MMBA-Time 2 region with the CR region data for both time periods. Again, we found no significant differences in the rates of voluntary turnover in these comparisons.

Summary regarding the effects of the MMBA on employee performance and voluntary turnover

As with the results from Study I, we found no compelling evidence that the installation of a binding and mandatory arbitration program for dispute resolution had a negative effect on employees’ rated performance, anticipated and self-reported employee OCBs or voluntary turnover. In addition, we found no evidence that the demographic characteristics of employees played any interactive role in reactions to the MMBA program. We found no significant differences in performance ratings, regardless of rating source or format, when we compared post-MMBA data with pre-MMBA data from the same region on the same employees or when we compared the post-MMBA (Time 2) performance data with the CR data from either Time 1 or Time 2.

We also found no effects for voluntary turnover rates and no evidence that any personnel voluntarily left the organization as a result of the imposition of the MMBA program despite some evidence from Study I that when employees are reminded of the program and asked to review it, they regard the MMBA as relatively less fair than the alternative ADR programs in place.

CONCLUSIONS, WEAKNESSES AND FUTURE RESEARCH

We did not find any of the effects we had anticipated when a mandatory arbitration program was imposed on an existing workforce. One explanation for this may be that the existing relationship itself serves as an ameliorating factor. The initial studies of worker reactions to ADR programs and their characteristics explored the attitudes of prospective job applicants (Mahony et al., 2005; Richey et al, 2001). Employers first imposed ADR programs on new hires as a condition of employment because the legality of imposing them on an existing workforce was unclear. Based on the findings with applicants,
Mahony et al. (2005) predicted serious justice concerns for existing employees, who might see the imposition as a retroactive change to a key element of the relationship and so a breach of the psychological contract. However, because prospective employees have no actual experience with the employer, the events in the recruiting process may be what shapes their view of the firm (Collins & Stevens, 2002; Gatewood, Gowan, & Lautenschlager, 1993.) For existing employees, even if an ADR program imposed by the employer is seen as unfair, the program represents only one of many factors to be used in evaluating the relationship. This would be consistent with the argument made by Olson-Buchanan and Boswell (2008) that following mistreatment at work there is a process through which employees, over time, determine the meaning of and appropriate reaction to the event. This would also appear to be consistent with Choi’s (2008) findings that overall perceptions of an employer’s fairness will moderate the relationship between the fairness perceptions of a specific event and employee outcomes.

Bernardin et al. (2009) have more recently looked at the reactions of existing employees to the imposition of a mandatory and binding arbitration program. Employees perceived such a program as being significantly less fair than other ADR program alternatives, and reported both lower levels of trust in the employer and reductions in intentions to stay. But in that study, the employees’ reactions were anticipatory. They were asked to review ADR program alternatives as part of the annual survey that the employer had routinely used as a forum for gauging employee opinions. Respondents may have emphasized their negative perceptions in the hopes of influencing the company’s policy decisions.

A second factor may be the fact that this study explores the attitudes of actual employees in a real world employment setting. Both Richey et al. (2001) and Mahony et al. (2005) used students in role play exercises as respondents. Even though the students in Mahony et al. were working graduate students, they still may not fully reflect the attitudes of an existing workforce. Moreover, as Colvin (2007) notes, studies of role play exercises rather than actual recruiting may have led to an overemphasis on the policies being studied. Thus, employee reactions are probably not fully captured by student proxies. It is interesting to note that the respondents in this study who were asked to review the policy prior to responding did find the MMBA program significantly less fair than other respondents, but did not report significant differences in job satisfaction, intentions to stay or performance. What we may be seeing is separation between the affective and the attitudinal and behavioral reactions to a change in one aspect of the psychological contract (Zhao et al., 2007). Student respondents viewing scenarios may not be in a position to make the same distinctions.

Finally, the results reflect both the make-up of this particular ADR program and the way in which it was implemented by this employer. Although the MMBA program put in place by this employer did not entirely match the “High Due Process” alternative tested by Mahony et al. (2005), it did have a number of positive features. Cost to employees was limited, the process included the involvement of a well-known and respected third party, and employees were insured a voice in selecting the arbiters. Employee reactions were sought prior to the adoption of the program and, when the program was imposed, employees were given a name and contact information should they wish to discuss the program at greater length. These features may have lessened employee concerns. Concerns about the program may also have been assuaged by the experience with the program prior to the Time 2 data collection. During this period, eleven of the responding employees had experience with the
program. For these employees, the MMBA program appeared to be no less fair than the “Open Door Policy” that had previously been in place. Although they represent a small percent of the surveyed employees, their limited experience may have been known by other employees who were reassured that the new ADR policy did not in fact reflect a dramatic change in corporate policy. All of these factors may have contributed to the sense-making process described by Olson-Buchanan and Boswell (2008) and allowed the employees to put a more nuanced interpretation on the mistreatment represented by the imposition of a program they may not favor.

These final factors also reflect weaknesses in this study. One of the strengths of this study is the fact it reflects the reactions of actual employees in a real world setting. However, this meant we were restricted to studying the specific MMBA program imposed by this employer. As mentioned above, it contained some due process elements but is not a match to the alternatives presented in Mahony et al. (2005). This limited our ability to test the effects of alternative mandatory arbitration characteristics. Similarly, since the study took place with a single employer we do not know the extent to which variations in the context, including the nature of the existing relationship and the implementation process, might affect the outcomes. Both of these issues appear to be important questions for future research.

Our research, combined with results involving job candidates in Bernardin et al. (2009) suggests that the message to practitioners is that it is possible to adopt a mandatory and binding arbitration program for an existing workforce without demoralizing employees, affecting performance or OCBs or increasing turnover. However, we should also be mindful that this result may depend on the specific program characteristics and the already established relationship between the organization and its employees.

REFERENCES


DOUBLE-EDGED SWORD: THE USE OF COMMUNICATION TECHNOLOGY TO MANAGE THE BOUNDARIES BETWEEN WORK AND HOME

Sonya F. Premeaux, Nicholls State University, sonya.premeaux@nicholls.edu
Cheryl L. Adkins, Longwood University, adkinscl@longwood.edu

ABSTRACT

Communication technologies now allow workers to work almost any time and any place, facilitating workers’ ability to integrate the home and work domains, but also allowing each domain to more easily and frequently intrude into the other. Communication technology, thus, can be viewed as a dual-edged sword leading to greater or lesser work-family and family-work conflict. We present a model proposing that workplace norms, integration preferences, family norms, gender and generation are antecedents of connectivity behaviors between home and work. The controllability of interruptions and role integration fit are presented as moderators of the relationship between connectivity behavior and work-family and family-work conflict. Implications for research and practice are presented.

INTRODUCTION

The introduction of the internet, along with changes in communication technologies such as the increased use of cell phones, and personal data assistants (PDAs), have radically changed the ways that workers connect with both their jobs and their families. These devices have allowed work to be conducted outside of traditional office settings and outside of the traditional nine-to-five workday. They also allow workers to remain connected to family members more easily while in the traditional office setting during the traditional nine-to-five workday. This flexibility and change in connectedness has many, often contradictory, implications for workers’ ability to balance work and family life. On one hand, the fact that workers may more easily work from home and after hours may lessen work-family conflict (WFC). For example, a worker may work in the evening after taking time out from the work day to attend a child’s school play or sporting event, work from home while caring for a sick child, or routinely work from home in the afternoons after the end of a child’s school day. Thus, the internet and new communication technologies may greatly facilitate a worker’s ability to balance work and family.

Paradoxically, however, connectedness may increase WFC as work can intrude into the home domain even more. Organizations may expect workers to be constantly connected to work even in jobs which traditionally have not required workers to be “on call.” In some workplaces, informal norms may create expectations that workers check e-mail in the evenings and on
weekends. Other organizations may provide cell phones or PDAs and require that workers be available after hours. Workers may even be expected to be connected to the workplace while on vacation. Similarly, family members may expect to remain in closer contact with an employee during work hours through the use of cell phones and e-mail. Thus, the use of communication technologies for crossing boundaries between work and home, and between home and work presents a double-edged sword with respect to WFC and family-work conflict (FWC). The use of communication technologies to cross the boundaries between work and home may facilitate balance and reduce WFC and FWC; however, on the other hand, the demands placed upon the worker by increased connection to one domain while in the other may increase WFC and FWC.

In this paper we will develop and present a model examining the antecedents of the use of communication technologies to cross the borders between home and work (in both directions). We will begin by defining WFC and FWC, describing the boundaries between home and work, and discussing how the internet and communication technologies may facilitate crossing, and even blurring, the boundaries. We will then present antecedents to the use of “technology-mediated devices” (Richardson & Rothstein, 2008) to communicate with members of one domain while in another thus crossing the boundaries between work and home. Subsequently, we present moderators of the relationship between these connectivity behaviors (CB) and WFC and FWC. Finally, we will present suggestions for future research and practice.

THE DOMAINS OF WORK AND HOME AND THE BOUNDARIES BETWEEN THEM

WFC is formally defined as interrole conflict that results when an individual’s participation in the work role interferes with participation in the family role (Greenhaus & Beutell, 1985). Thus, WFC occurs when the demands of the workplace interfere with the worker’s ability to respond to the demands of family life. Similarly, FWC is defined as interrole conflict that results when an individual’s participation in the family role interferes with participation in the work role, and occurs when the demands of the worker’s family life interfere with the worker’s ability to manage his/her work responsibilities (Greenhaus & Beutell, 1985). Researchers have examined a range of factors that may lead to WFC and FWC (such as the number and ages of children and marital status in the family arena, and workplace policies and job responsibilities in the work arena) and a range of outcomes of both WFC and FWC (including job satisfaction, satisfaction with family, and stress to name a few; see Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005 for a review).

Recently, researchers have examined the ways workers establish and maintain boundaries between work and home (Ashforth, Kreiner, & Fugate, 2000). Individuals are described as creating boundaries between work and home that are defined by both time and location. Examples of temporal boundaries are the traditional nine-to-five work day, or the hours set apart
to work at home in the evening. Boundaries of location are exemplified by an individual physically going to an office away from the home, or by retreating to a home office. The boundaries between home and work may create an environment that is segmented, with the work environment distinct from the home environment in terms of time and location, or integrated with an employee working from home and interspersing family concerns with work.

The degree of segmentation versus integration is determined by the demands and policies of the workplace, and by individual preferences. For example, an employee who works predetermined hours in a workplace away from home has a high degree of segmentation between the home and the work roles. If organizational policies prevent the employee from receiving phone calls from home during the workday, the degree of segmentation is higher. At the other end of the spectrum, the employee who works from home and who is able to interrupt the flow of work to respond to a child’s needs has a high degree of integration between the roles. The internet and other technology mediated devices may facilitate the transitions between boundaries or even blur the boundaries between work and home. In situations of high segmentation a worker may use a cell phone to call home on the way from work to ease the transition between home and work. In situations of higher integration, a worker may use e-mail to remain in contact with the workplace while staying at home with a sick child. However, in integrated roles, the use of the internet and other communication technology may lead to blurring of the boundaries and ultimately to employee stress. For example, receiving e-mails or phone calls about work while engaging in a parental activity may cause anxiety or even resentment (Ashforth et al., 2000).

Similarly, Clark (2000) developed work-family border theory to “explain how individuals manage and negotiate the work and family spheres and the borders between them in order to attain balance” (Clark, 2000, p. 750). Clark described borders as the “lines of demarcation between domains” and noted that they can be physical, temporal, or psychological. She noted that borders may vary in permeability, flexibility, blending, and strength. Permeability is described as “the degree to which elements from other domains may enter” (Clark, 2000, p. 756), and flexibility as “the extent to which a border may contract or expand, depending on the demands of one domain or the other” (Clark, 2000, p. 757). Border-keepers, domain members who are influential in defining the domain and border (for example supervisors and spouses), negotiate what makes up the domain and its borders. Border-keepers impact border flexibility as they apply their own ideas of what constitutes work and family and as they protect domains and borders. Their awareness of the other domain and their commitment to the border-crosser impacts work-family balance as do domain differences and communication patterns. The use of communication technologies may facilitate the crossing of borders by facilitating communication with family during the workday or allowing an employee to work at home to attend to family demands. However, they may also increase the flexibility and permeability of the borders
beyond the desire of the worker, for example when workplace rules or norms dictate that he/she check e-mail in the evening or on weekends, or be available by cell phone during vacations.

**A MODEL OF CONNECTIVITY BEHAVIOR TO CROSS BOUNDARIES**

Scholars addressing boundary theory indicate that the degree of segmentation versus integration a worker faces stems from workplace policies and norms, his/her own role integration preferences, and the expectations and preferences of other family members (Ashforth et al., 2000). Border theory similarly proposes that the extent to which an individual is a central participant in a domain will determine the influence he/she has over the borders of the domain. Border theory further suggests that the degree of domain members’ awareness of the worker’s other domains and commitment to the worker will influence WFC (Clark, 2000). Thus, researchers believe that there are distinct borders and boundaries between work and home, and that the formal policies and norms of the organization, individual role integration preferences, and family norms and expectations all influence the ease with which an individual may move between the domains and, ultimately, that individual’s level of WFC and FWC. The use of communication technologies may ease the individual’s movement between domains, but when used to a high degree may blur the boundaries between home and work. As illustrated in Figure 1, we thus propose that workplace policies and norms, individual preferences regarding segmentation versus integration, and family norms and expectations are all antecedents of the use of CB to cross or even blur the borders between the domains of work and life. We further propose two individual differences, gender and generation, as antecedents of the use of CB to cross the boundaries between the domains of work and home. Each of the antecedents is discussed below.

**FIGURE 1**

**ANTECEDENTS AND CONSEQUENCES OF CONNECTIVITY BEHAVIORS**

![Diagram of Antecedents and Consequences of Connectivity Behaviors]

- Workplace Policies & Norms
- Role Integration Preference
- Family Norms & Expectations
- Controllability of Interruptions
- Role Integration Fit
- Connectivity Behaviors
- Work-Family Conflict
- Family-Work Conflict
- Gender
- Generation
ANTECEDENTS OF CONNECTIVITY BEHAVIOR

Workplace Policies and Norms

Workplace policies and subjective norms about communication technology use play a role in workers’ CB. Employers may have formal policies requiring that employees be on-call during certain periods. With respect to crossing the border between home and work, it is not at all unusual for the formal rules of the organization and the very nature of the of the job to dictate when and through which means family members may contact workers during work time. For example, in settings such as factories it is not unusual for the organization to have policies that prohibit phone calls during working hours except in case of an emergency.

Beyond formal policies are subjective norms. Simply having communication devices supplied by the employer may both add formal work rules and extend a subjective norm. When companies provide workers with communication devices they create the expectation that employees will be continuously available. In a study of “work-extending technology” one participant observed, “I believe that while technology has increased the ability to work from the home and outside regular business hours, it has also increased the expectation that you do so.” (Towers, Duxbury, Higgins, & Thomas, 2006, p. 615).

Empirical research supports this argument. Richardson and Rothstein (2008) explored the impact of organizational distribution of wireless email devices and laptops on CB, an individual’s use of these devices to communicate with colleagues during non-work hours. Results showed that when the communication device was provided by or paid for by the employer, employees used the device more often and for longer periods of time than they would have otherwise.

The study also explored the effects of subjective norms on CB. A subjective norm is “a person’s perception that most people who are important to him think he should or should not perform the behavior in question” (Fishbein & Ajzen, 1975, p. 302). In regards to CB, subjective norms guide workers in their beliefs about whether they should be accessible to colleagues after work hours. Richardson and Rothstein (2008) found that subjective norms about connectivity did positively impact both frequency and duration of CB. When workers believed they were expected to respond to colleagues during non-work hours, they were more likely to do so. Further, workers have been shown to match their communication technology use to that of their supervisors and to their perceptions of organizational norms (Turner, Grube, Tinsley, Lee, & O’Pell, 2006). Moreover, supervisors’ ratings of workers’ performance seem to be positively influenced by workers’ technology use (Turner, Grube, Tinsley, Lee, & O’Pell, 2006). We thus propose that:
Proposition 1: Workplace policies and norms that restrict communication between family and work will be associated with lower levels of connectivity behavior between the domains.

Proposition 2: Workplace policies and norms that encourage communication between work and home will be associated with higher levels of connectivity behavior between the domains.

Proposition 3: Communication devices provided by the organization will be associated with higher levels of connectivity behavior between the domains.

Individual Role Integration Preferences

As noted previously, workers differ in their preferences for segmentation versus integration of the domains of work and life (Ashforth et al., 2000). Some employees prefer to maintain rigid, somewhat impermeable boundaries between home and work. An example of this would be a worker whose work is performed in the workplace and who may make and receive phone calls only during breaks. Other employees prefer to maintain flexible, easily crossed boundaries between home and work.

One way individual preferences are also manifest is in the workers’ use of communication technologies to remain connected to the workplace and in their actual patterns of connection. For example, Golden & Geisler (2007) investigated how workers used PDAs to manage the boundary between work and home. Participants used their PDAs in very distinct patterns ranging from segregating work and personal life, with more focus on work for some and more focus on home for others, to fully integrating work and personal life. Their results indicate that individuals have diverse and sometimes contradictory goals for boundary management and these goals can vary even within individuals. At one time an individual may desire integration of home and work while at another time desiring segmentation. Further, it should be noted that the boundaries between home and work are differentially permeable (Ashforth et al., 2000).

Some individuals are more likely to use CB, and, thus, to have more fluid boundaries between home and work. Role integration preferences exert a strong influence on CB as do a tendency toward multitasking and personal innovativeness with information technology (Richardson & Rothstein, 2008). Further, workers with high ambition and job involvement (Boswell & Olson-Buchanan, 2007), as well as those with strong role identity (Olson-Buchanan & Boswell, 2006), are more likely to use communication technologies that allow role integration. We thus propose that:
Proposition 4: Individual preferences for role segmentation will be associated with lower levels of connectivity behavior between the domains.

Proposition 5: Individual preferences for role integration will be associated with higher levels of connectivity behavior between the domains.

Family Norms and Expectations

Perceptions about subjective norms can be extended to home border-keepers, making border-keepers’ expectations important considerations in workers’ boundary spanning behaviors. While the use of communication technologies may lead to positive outcomes due to greater flexibility in work-life borders, if family members react negatively to these blurred boundaries or to the CB themselves, undesirable outcomes are likely. According to Clark (2000), border-keepers use their own experiences to define the work and family domains, leading some to carefully guard work-family borders which may result in decreased border flexibility and may impede workers’ ability to manage these borders.

In Tower and colleagues’ (2006) study on “work extending technology” including laptops, mobile phones, PDAs, smartphones, and home computers the majority of respondents perceived that their families understand their need to use these technologies to work during family time. On the other hand, a substantial number also stated that their families did not like it. The mixed reactions are to be expected given the mixed results of technology’s impact on participants’ home lives. On a positive note, respondents identified benefits including their ability to keep in contact with family while at work, ability to work overtime at home rather than at work, ability to work from home while meeting family responsibilities, and improved work-family balance. On the down side, they reported that time was given to work instead of family and the devices were seen as intrusive. Similarly, Batt and Valcour (2003) found that technology facilitates workers’ ability to juggle work and family, but at the same time it increases disruptions in the family domain.

It appears then that when it comes to workers’ home lives, communication technology devices are a double-edged sword, both allowing workers more time to attend to family issues and allowing work to more frequently encroach on family time. As workers’ struggle with balancing the use of communication devices for work with being present while at home, employees and border-keepers alike have tried to regulate when and where connectivity is acceptable. Some families maintain strict boundaries between work and home, with workers turning their communication devices off when they don’t want to be interrupted, leaving them behind, or simply just not answering them (Wajcman, Bittman & Brown, 2008). These results indicate that
just as subjective norms guide employees’ beliefs about the need to be accessible to colleagues (Richardson & Rothstein, 2008), they may also guide their beliefs about not being accessible at certain times and/or in certain places. The theory of reasoned action (Fishbein & Ajzen, 1975) suggests that if an individual perceives that his/her family expects him/her to curtail CB involving work while in the family domain, the individual is more likely to do so. Likewise, perceived expectations to remain connected with family while working will increase the likelihood of engaging in CB while at work. Some family situations may dictate higher connectivity during work hours. For example, a worker may need to stay in close touch if a family member were ill. Thus, family needs and norms dictate CB while the individual is in the work environment. We propose that:

Proposition 6: Family preferences and norms will be associated with connectivity behaviors from home to work, and from work to home.

Proposition 7: Family needs will be associated with connectivity behaviors from family to work.

As noted above, in addition to the antecedents of the use of communication technologies to cross the borders between home and work, individual differences may also play a role. Specifically we propose that gender and generation, may also predict the use of communication technologies to cross the boundaries or borders between work and home.

**Gender Differences in Connectivity Behaviors**

Empirical evidence suggests that there may be gender differences in the use of the internet and associated communication technologies. Boswell and Olson-Buchanan (2007) found that being male was positively associated with using the internet and other communication technologies to connect with the workplace after hours. Galinsky, Kim, and Bond (2001), in a study of employees’ feelings of being overworked found that the use of technology for connection to the workplace after hours was associated with feelings of overwork. They found that men were more likely than women to be connected to the workplace after hours. Another workplace survey found that men were more likely to remain connected to the workplace during vacations than were women, although a sizeable proportion of women did also (33% of men and 25% of women responding to the survey; Rothberg, 2006).

Research suggests that women may be more likely to exhibit CB to remain connected to family while at work. The impact of using the internet and other communication technologies to cross the borders between home and work may reinforce (or be a symptom of) women’s traditional role as the primary caregiver of children. Chesley (2005) found that the use of cell phones to
cross the borders between home and work was positively associated with WFC for both men and women, but that it was associated with family-to-work conflict only for women. Similarly, Rakow and Navarro (1993) found that for women the use of the cell phones has extended their family responsibilities into the workplace. They described this phenomenon as “remote mothering” and “the parallel shift.” They even noted that early marketing campaigns for cell phones were targeted at the “supermom.” Thus, we propose that:

Proposition 8: Men will exhibit higher levels of connectivity behaviors to connect with work while at home.

Proposition 9: Women will exhibit higher levels of connectivity behaviors to connect to family while at work.

Generational Differences in Connectivity Behaviors

Connectivity behaviors may also differ by workers’ membership in generational groups due either to generational differences in technology adoption or generational differences in work values. Smola and Sutton (2002) found evidence to “suggest that work values are more influenced by generational experiences than by age and maturation” (p. 379). They also found, however, that across all ages, there is an increasing desire for a balance between work and personal goals. These findings were supported by Beutell and Wittig-Berman (2008) in a study of generational differences in WFC and work-family synergy utilizing the 1997 and 2002 National Study of the Changing Workforce. They found that whereas the antecedents and outcomes of WFC and work-family synergy differed among the three generations studied, all three cohorts exhibited lower work interference with family in 2002 than the 1997 cohorts suggesting perhaps that all three generations are striving toward greater balance between home and work.

Conversely, as Chesley (2005) noted, younger workers, who have grown up using e-mail, cell-phones and other communication technologies may simply expect to be connected “24/7” and see the blurred boundaries between home and work as the norm. Using a symbolic interactionist methodology, Schlosser (2002) studied new smartphone users in two municipalities to determine how employees used their wireless technology devices. One participant observed about the technology, “I don’t let it control me -- That’s the difference I’ve seen in younger people at work. They let it control them -- they never take it off” (p. 416). Thus, there appear to be generational differences both in expectations of flexibility and in patterns of technology use with younger generations more likely to use CB than older generations.
Proposition 10: Generational cohorts will exhibit differing levels of connectivity behaviors with higher levels of connectivity behavior for younger generations than for older generations.

POTENTIAL MODERATORS

As noted previously, the use of CB to manage borders between home and work is a double-edged sword with respect to WFC and FWC. Flexibility to manage the demands of both domains through the use of communication technology may reduce both WFC and FWC; however, the use of CB to cross the borders may allow one domain to intrude into the other excessively. For example, a high volume of communication from a spouse or children while at work may lead to high FWC, whereas excessive communication from the work domain while the worker is in the home domain may lead to WFC. As Figure 1 shows, these effects of CB on WFC and FWC are expected to be moderated by the controllability of interruptions from communication technology devices and role integration fit, i.e., the fit between an individual’s preference for integration or segmentation and the degree of integration or segmentation offered by the work and family domains.

Controllability of Interruptions

A major consideration in whether the internet and other communication technologies exacerbate or ameliorate WFC is the controllability of interruptions. Control is one’s perception of the degree of influence one has over some facet of one’s environment, in this case, control over interruptions from communication technology. For example, the use of e-mail and other online features to remain connected to the workplace may be less intrusive than the use of cell phones and pagers. While the employee may easily check the former at a time of his/her choosing, leading to greater feelings of control, the latter are thought to demand more immediate attention and may lead workers to feel less in control.

Scholars have studied control in prior WFC research finding positive effects. Higher job control has been linked to lower WFC (Grönlund, 2007; Heponiemi, Elovainio, Pekkarinen, Sinervo, & Kouvonon, 2008; Kossek, Lautsch, & Eaton, 2006), turnover intentions (Kossek, Lautsch, & Eaton, 2006), and depression (Kossek, Lautsch, & Eaton, 2006), and control over work hours has been shown to moderate the relationship between long work hours and work’s interference with family (Hughes & Parkes, 2007). We expect controllability over interruptions from communication technologies to play a similar role here. That is, when employees feel they can exert control over their CB by limiting interruptions, some of the conflicts between home and work related to CB can be assuaged.
Workers often attempt to control what passes through work/life boundaries, allowing more or less spillover via CB, depending on their personal preferences. Mobile phone users have been shown to exert control over the boundary between work and home by turning off, leaving behind, or not answering the cell phone when they do not want to be interrupted (Wajcman et al., 2008). Additionally, workers may choose not give out their phone numbers, stick to using the phone only during certain times, or not using them at all outside of normal work hours (Towers et al., 2006). Golden and Geisler (2007) have, in essence, postulated that the spirit of the PDA is control. In an investigation of how mobile technology is used to increase boundary permeability, respondents who reported not using these technologies on nights and weekends indicated that they deliberately chose not to do so in order to maintain boundaries for health and family reasons (Towers et al., 2006). Even high users of CB reported trying to control their use by limiting when and where they use the technology. On the other hand, despite these efforts, 40 percent felt that their attempts were unsuccessful and the majority of those blamed their lack of control on the lack of boundaries between work and non-work time. As mentioned previously, workers whose technology devices were provided by or paid for by their organizations used the devices more often and for longer periods than they would have otherwise (Richardson & Rothstein, 2008). Thus, we expect individuals’ perceptions of controllability of interruptions from communication technologies to moderate the relationship between CB and both WFC and FWC. When an individual exerts control over interruptions from communication technologies, he/she is less likely to experience negative effects and more likely to experience positive effects from CB on WFC and FWC. Conversely, inability or unwillingness to control these interruptions will exacerbate negative outcomes of CB on WFC and FWC and will ameliorate positive effects. We propose that:

Proposition 11: The extent to which interruptions from home to work are controllable will moderate the relationship between connectivity behaviors and family-work conflict.

Proposition 12: The extent to which interruptions from work to home are controllable will moderate the relationship between connectivity behaviors and work-family conflict.

Fit on Preferences for Segmentation versus Integration

We further propose that fit between the degree of segmentation or integration that the individual desires and the degree of segmentation versus integration offered by the work and family domains moderates the relationship between the use of CB to span the boundaries and FWC and WFC. As Ashforth and colleagues (2000) noted, individuals differ in their desire for the degree...
of segmentation between work and home domains. Since total segmentation and total integration are rare, workers tend to exist in environments that lie somewhere on the continuum between the two extremes. The degree of segmentation dictated by the work environment depends on the nature of the job and the policies and procedures of the workplace. The worker may add to the degree of segmentation versus integration by acting upon their own preferences and the preferences and expectations of their family when the work situation allows.

Edwards and Rothbard (1999) examined the fit between individuals’ desire for segmentation and the extent of segmentation offered by the work setting. Using a supplies-values conceptualization of person-environment fit, they found that well-being increased as the amount of segmentation desired by the worker matched the amount offered by the workplace. Worker well-being decreased as the extent of segmentation offered by the workplace exceeded the amount desired by the worker.

Just as the degree of integration or segmentation varies in work environments and in workers’ preferences, Rothbard, Phillips, and Dumas (2005) argued that organizational polices also reflect varying degrees of integration and segmentation and the fit between these policies and workers’ preferences would moderate the relationship between the organizational policies and job attitudes. They investigated the fit between onsite day care and flextime and individuals’ role integration preferences. They found that job satisfaction and organizational commitment were lower for individuals who desired segmentation but were provided with onsite day care (an integrating policy) and that organizational commitment was higher for individuals who desired segmentation and were provided flextime (a segmenting policy). Their findings support the importance of congruence between what workers want and what organizations provide. Building on Rothbard and colleagues (2005), we propose that the fit between the degree of segmentation desired by the employee and the degree offered by the employer will moderate the relationship between CB to remain connected to the workplace and WFC. We also propose that the fit between the degree of segmentation desired by the employee and the degree offered by family needs and expectations will moderate the relationship between CB to remain connected to the family during the workday and FWC. Again, it should be noted that the boundaries between family and work are differentially permeable, thus workers may desire different levels of integration between the two domains.

Proposition 13: Person-environment fit on the dimension of role integration will moderate the relationship between connectivity behaviors and work-family conflict.
Proposition 14: Person-environment fit on the dimension of role integration will moderate the relationship between connectivity behaviors and family-work conflict.

CONCLUSION

The use of the internet and associated communication technologies represents a double-edged sword for employees in managing WFC. The use of such technologies offers workers the ability to work anytime and anyplace, and thus to better balance the demands of work with the demands of family life. Paradoxically, this increased ability to work anytime and anyplace has sometimes resulted in expectations that employees be connected to the workplace virtually 24 hours a day. As we have seen, these expectations are sometimes generated by managers, but sometimes they stem from the employees themselves. We have presented a model proposing that workplace policies and norms, individual preferences, family norms and expectations, gender and generation are antecedents of connectivity behavior between work and home. We also proposed that the controllability of interruptions and person-environment fit on preferences for role integration are moderators of the relationship between connectivity behavior and work-family and family-work conflict. This model is aimed at increasing our understanding of how workers manage the complex boundaries between the work and family domains.

Recommendations for Research

Future research should examine these proposed relationships in multiple organizations that provide a range of workplace rules, demands, and norms. The sample should also draw upon a wide variety of respondents, representing a rich diversity of individual preferences for role integration, as well as a variety of family expectations, needs, and norms. Given the proliferation of new communication technologies which provide both increased opportunities and expectations for connection across the boundaries between work and family, it is important that we better understand how CB may be associated with WFC and FWC. This is especially important in light of the fact that these communication technologies are facilitating a trend toward flex-time and flex-place work policies. We must also consider that boundaries between home and work are differentially permeable and that worker preferences for integration versus segmentation are not static.
Practical Implications

To realize the positive potential for the internet and associated communication technologies in workers’ quest to achieve balance between home and work it is essential that employers develop policies and sustain a workplace culture that supports such balance. It is also essential that workers be proactive in defining when and where they are available to their employers outside of the traditional workday, and in negotiating and communicating with both employers and family members. With positive communication and cooperation between employers and workers the full potential of the internet and associated communication technologies to facilitate both increased productivity and decreased WFC and FWC may be realized.

Implications for managers

Despite the potential benefits of workers’ ability to work anytime, anywhere, excessive intrusion of work into workers’ personal lives can sometimes lead to undesirable outcomes. In addition to increased WFC, incessant work or working in non-traditional settings can have a detrimental impact on work quality and can lead to increased stress. Given these negative effects, organizations need to be aware of the signals they are sending through their policies and norms regarding expectations for connectivity while away from work and for work-family integration.

Companies should help managers and supervisors recognize the potential downside of employees being too tied to their jobs and the wisdom of supporting work-family balance. Although many companies have work-life benefits in place, workers are often fearful of using them because they perceive that doing so can have potential negative effects on their careers (Ruderman, Graves, & Ohlott, 2007). Research has demonstrated that managerial support is an important factor in mitigating WFC (Premeaux, Adkins, & Mossholder, 2007; Thomas Ganster, 1995). Extending these findings to communication technology, supervisors need to be made to understand the importance of workers’ disconnecting and encouraged to support workers’ attempts at juggling home and work, including not only using available work-life benefits, but also tuning out on a regular basis. Supervisors themselves should model these behaviors. Formal policies limiting phone calls and e-mail after hours and on weekends or informal policies about how much of these types of behaviors are acceptable may be required (Boswell & Olson-Buchanan, 2007). Research shows that flexible work policies that are fluid and adaptable to a wide variety of situations appear to work best (Van Deusen, James, Gill, & McKechnie, 2008).

Companies should also educate workers about the importance of turning off and tuning out digital devices that allow work to intrude at home. As mentioned previously, when organizations provide or pay for connectivity devices workers use the devices more frequently and for longer durations (Richardson & Rothstein, 2008). Managers at companies with successful flexible work
programs indicate “that they have had to find a way to make the new way of working the expected way of working” (Van Deusen, et al., 2008, p. 6). It seems that if workers perceive the need to be connected 24/7 when their employers provide them with communication gadgets or through workplace policies and norms, employers’ permission, and even encouragement, to turn the devices off may be required for workers to comfortably do so.

Beyond educating supervisors and workers on the wisdom of disconnecting from work on a regular basis, cultural values that support family and personal roles need to be developed and nurtured. A supportive work-family culture may increase workers’ resources and decrease the stress of work-family interference. Research shows that individuals may actually welcome the blurring of boundaries between home and family because integration facilitates maintaining close communication ties with family and friends (Wajcman et al., 2008) and a supportive work-family culture contributes to lower levels of WFC (Premeaux, Adkins, & Mossholder, 2007; Thomas & Ganster, 1995). However, if cultural norms prohibit workers from making or receiving phone calls or other communications from home during the workday, integration is unlikely. Establishing formal or informal policies about what is acceptable in terms of work-family integration can help alleviate workers’ fears associated with family spillover into work, but policies alone are not enough. Integrating work and life and controlling communication technology’s impact may require a cultural change.

Implications for Workers

As the previous discussion has indicated, the use of the internet and other communication technologies to span the boundaries between home and work has both positive and negative implications for managing WFC. It is imperative that workers, in conjunction with family members and employers, actively manage these devices to facilitate balance. Workers should reflect on their preferences for segmentation or integration between the home and work roles, and then structure their environment to best reflect those preferences. While workplace policies may define the location of work during the traditional nine-to-five workday, a worker may choose to designate a location such as a home office for work that is performed after-hours or for regular telecommuting. Workers who desire a higher degree of segmentation may choose to work exclusively from the work location or to work from a “third place” such as a café or library. A higher degree of segmentation on the temporal dimension may be achieved by simply designating a specified time period, for example, a couple of hours after children are in bed, for working from home. This is especially important with respect to availability for receiving and returning phone calls. Calls and instant messages have been found to be more intrusive and thus more detrimental to work-family balance, than e-mail simply because they seem to demand more immediate attention and are more likely to directly interrupt family time (Chesley, 2005).
Workers should also evaluate the necessity of connectivity after-hours. Boswell and Olson-Buchanan (2007), in a study of University employees, found that workers whose jobs did not require after hours connectivity tended to check e-mail and other communication media after hours simply because the devices were available. This suggests that some workers may stay connected simply because they can. Workers should evaluate the amount of after-hours work and connectivity that is necessary, and the amount that benefits work-family balance. Some jobs may require that the worker be available after hours, while other workers may benefit from the flexibility that the connectivity provides.

It is vital that the worker communicate with family members to negotiate the structure for managing work and work-related communications after hours. The preferences of spouses or significant others may be incorporated in setting the structure of when and where the worker is available to receive and respond to calls, e-mails, and other work-related communications outside of traditional working hours. Once the structure is established, it should be communicated to family members so that they know when the worker has set aside time for work activities and whether he or she is also available to family members at that time. Family members may be much better able to cope with any intrusions of the work environment into the home environment when they understand the expected duration of such intrusions. For example, the worker may communicate to a child that he or she must have an hour without interruption to respond to a work-related call or attend to other work matters from home, but then the parent will be available to the child for an activity at the end of that time period.

The worker's preferences for accessibility outside of the workplace and working hours should also be communicated to others in the work arena. A worker who desires a degree of segmentation should communicate to supervisors, colleagues, subordinates, and clients when he/she is available to receive and respond to phone calls, e-mails and other communications. As discussed in the previous section, managers should actively think about the impact of high levels of connectivity on workers’ personal lives, evaluate the necessity of after-hours communications, and minimize such communications when possible.

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DIVERSITY TRAINING EFFECTS ON EMPLOYMENT PRACTICES: AN EXPLORATION OF INFORMATION TECHNOLOGY ORGANIZATIONS

Corey H. Thomas, TUI University, coreythomas@bellsouth.net

ABSTRACT

The purpose of this study was to determine if a relationship existed between diversity training and equitable hiring practices. The study employed a Solomon four-group experimental design to investigate the effectiveness of the diversity training to impact equitable hiring practices within an organization. The effectiveness of the training is measured using Kirkpatrick’s four-level model. The study was conducted at two technology-based corporations located in the Tennessee Valley region and consisted of 89 subjects. The statistical analyses of the collected data support the conclusion that diversity training does not have an effect on equitable hiring practices in the workplace.

INTRODUCTION

A more diverse workforce has caused organizations to retool their employment practices. “Demographers have reported that the future workforce population will include an increased number of women, more minorities, varieties of ethnic backgrounds, more aging workers, and people with different lifestyles” (Wentling & Palma-Rivas, 2000, p. 35). In contrast, the population within the information technology (IT) career field will not follow the trend (Smith, 2004). This may be attributed to the argument that IT as a whole produces a monolithic culture failing to provide exposure to minorities or stimulate their interest in the IT field (Ford & Whaley, 2003). Although IT organizations are struggling to employ as diverse a workplace as other organizations, given the anticipated increase in workforce diversity, the use of diversity training within the IT organization may facilitate the attraction and retention of a more diverse workplace. In the United States, diversity training has become a popular tool for managing and trying to reap the benefits of diversity as the workforce population is becoming increasingly more diverse in terms of race, gender, and age (Holladay & Quiñones, 2005). However, diversity training initiatives often fail to have a substantial impact on an organization (Holmes, 2005). It is noted that researchers have recognized the absence of good conceptual frameworks as the major contributing factor to the mediocre success of diversity initiatives within organizations (Schneider & Northcraft, 1999). The lack of return of investment measurements of diversity initiatives are attributed to a lack of knowledge regarding training evaluation design and a suitable evaluation model (Abernathy, 1999; Kraiger, McLinden, & Casper, 2004).
PROBLEM STATEMENT AND PURPOSE

Equitable hiring ensures that underrepresented groups are attracted and retained; this goal goes beyond methodological modus operandi and requires an understanding of employee differences (Payton, 2004). The use of diversity training allows the organization to proactively enhance the participation of everyone in the organization, including increasing the inclusion and participation of minorities (Mitchell, 2005; Pfau & Cohen). Although the leadership of an organization realizes that employing a diverse workforce will lead to a competitive advantage, without intervention, organizations may not only fail to achieve the benefits of a diverse workforce, but diversity may become detrimental to the organization (Moody, Woszcynski, Beise, & Myers, 2003; Richard, 1999). The valuing of diversity requires the individual to assume the responsibility of increasing his or her aptitude regarding differences that lead to restrained apprehensions within the workplace (Vereen, 2004b). The effectiveness of diversity training is not based on the acquisition of awareness knowledge but by the ability of the employee to transfer the knowledge to the workplace thus generating tangible results for the organization (Ellis, Bell, Ployhart, Hollenbeck, & Ilgen, 2005). Despite the widespread use of diversity initiatives, limited empirical data exist documenting the effectiveness of the training to ensure achievement of organizational goals such as equitable hiring practices (Ivancevich & Gilbert, 2000; Roberson, Kulik, & Pepper, 2003). The lack of empirical data validating the facilitation of a diverse workforce as a result of equitable hiring practices stimulated by diversity training is attributed to the lack of an evaluation framework (Abernathy, 1999; Kraiger, et al., 2004; Schneider & Northcraft, 1999).

The purpose of this quantitative survey study was to use Kirkpatrick’s four level evaluation model (Kirkpatrick & Kirkpatrick, 2006) to relate diversity training (independent variable) to equitable hiring practices (dependent variable) for employees of two technology-based corporations, within the southeastern region of the United States, whom are working in positions influencing human resource decisions in their organization. The quantitative research method was used based on its characteristic of predicting relationships among variables (Creswell, 2002).

RESEARCH QUESTIONS

The study was guided by the following research questions:

1. How does diversity training influence the hiring practices of organizations employing IT personnel?
2. How does diversity training influence the self-efficacy of individuals working in IT organizations?

3. How frequently do individuals who demonstrate higher levels of cognitive learning from diversity training embrace the concept of workplace diversity?

4. What is the effect of self-efficacy on the hiring practices of individuals participating in diversity training at IT organizations?

THEORETICAL FRAMEWORK

The foundation of this quantitative study was the theoretical framework of the social cognitive theory (SCT), which was developed based on the social learning theory (SLT). The theory’s “important constructs include mental representations of our capacity to successfully perform tasks (self-efficacy), expectancies about the likely outcomes if we act (outcome expectations), and future plans (goals)” (Douglas, 2001, A Synthesis of Three Paradigms section, ¶3). The SCT, credited to psychologist Albert Bandura, focuses on self-efficacy and purports that verbal-symbolic intervention is the principal learning variable linking motivation and reaction (Douglas, 2001).

Bandura posited in the SCT that individuals gain knowledge through watching the behaviors and the consequences of the behaviors of others (Douglas, 2001; Gibson, 2004). This observational learning, as stated by Bandura (1986), conforms to a process resulting in individuals translating a prototypical event into carrying out the desired actions by matching their behavior to those of the model. The model may be an individual, actual or figurative, or a set of directions (Gibson, 2004). The process of observational learning as detailed by Bandura (1986), contains four components: attention, retention, behavior production, and motivation.

The SCT proposes that the predictors of self-efficacy are the ability of the individual to act out observed actions, verbal persuasion, and the physiological and emotional state of the individual (Bandura, 1986). The concept of self-efficacy is directly applicable to learning and performance; individuals perceived as having high self-efficacy are expected to actively participate in learning regardless of any barriers that may hinder learning (Gibson, 2004). It is noted that evaluation of their self-efficacy motivates the individuals to achieve learning objectives based on their self-confidence that they have the competence to accomplish their objectives (Gibson, 2004).

LITERATURE REVIEW
The United States is confronted by a plethora of diversity dilemmas, from racial and gender diversification to the often ignored diversities within these groups such as religion, educational background, and sexual orientation (Malveaux, 2005). The diversity movement suggests that society benefits from diversity since the individual differences of citizens stimulates diverse thoughts and actions (Malveaux, 2005). “What began for many as an effort to meet governmental and legal requirements has evolved into a strategic priority aimed at positioning organizations more competitively in the marketplace” (Jayne & Dipboye, 2004, p. 409). Companies are broadening their recruitment efforts to include more applicants from diverse demographics (Sorensen, 2004). Bergen, Soper, and Parnell (2005) have argued that evidence suggests that a heterogeneous workplace can facilitate future recruitment of minority candidates. According to Holmes (2004), organizations can realize many benefits from a diverse workforce, but to achieve them, they must recognize the benefits they will receive.

**Difference in Valuing and Managing Diversity**

Diversity has transformed from a buzzword to either an asset or a liability for today’s organizations (Rijamampianina & Carmichael, 2005). The successful valuing and management of diversity will determine whether diversity is an asset or not. Organizations that practice valuing diversity within the organization while neglecting the management of diversity yield diversity as a liability; in contrast, a combination of valuing and managing diversity yields diversity as an asset to the organization (Clements & Jones, 2006).

Valuing diversity requires organizations to create an environment conducive to open communication, allowing employees to recognize and understand their differences (Vereen, 2004a). To achieve maximum gains, organizations must lessen the tensions and improve the inequality existing between diverse groups in the workplace (Emerson, Kimbro, & Yancey, 2002). Organizations that take the initiative to facilitate an organizational atmosphere which mitigates problems related to diversity will profit from the enhanced performance associated with the employment of a diverse workforce (Rijamampianina & Carmichael, 2005). Management of a diverse workplace is imperative to the realization of diversification benefits. The organization’s “market share, efficiency, human capital, international competitiveness, and level of innovation will depend in part upon [its] ability to effectively manage a diverse workforce both within and across organizational boundaries” (Härtel, 2004, p. 190). The appreciation and management of diversity is a growing and necessary preoccupation for organizations (Kidder, Lankau, Chrobot-Mason, Mollica, & Friedman, 2004).

Organizations must provide the diverse workforce with the atmosphere and tools required to allow employees to perform to full potential in an equitable environment (Kundu, 2003). Management of diversity is inclusive of all employees and not just those of protected groups and
requires the organization to create an environment conducive to the growth and productivity of everyone regardless of identifying characteristics such as race or gender (Smith et al., 2004). According to Rijamampianina and Carmichael (2005), diversity management is often confused with programs designed to create equitable employment such as affirmative action. Equitable hiring practices are linked to the successful management of a diverse workforce, yet organizations insist that little direction is provided to assist in inculcating the importance of diversity in the workplace (Combs, 2002).

**Training as Diversity Improvement Strategy in IT Organizations**

Improving diversity in IT organizations involves two steps: recruiting diverse employees and retaining these diverse employees. The recruitment and retention of a diverse workforce requires the efforts of all employees as success is contingent on conveying the message to candidates and employees that diversity is valued within the organization (Avery & McKay, 2006). Diversity training facilitates the valuing of diversity by facilitating an awareness of discriminatory acts that hinder equitable hiring practices.

Diversity training is the most effective manner of exposing employees from different backgrounds to the intricacies of diverse cultures (Stone, 2005). Through the training, employees learn not only to remove barriers to performance caused by cultural differences but to also respect the cultures of all employees. This respect translates into visible actions such as the displaying of acceptance of cultural and ethnically specific holidays (Leung, 2005). The effective management of a diverse workforce, facilitated by effective diversity training, improves the marketability of the organization to its customers as well as potential and current employees (Sparrow, 2006). Without diversity training, IT organizations will fail to reap the benefits of having a diverse workforce, which ultimately will affect the organization’s bottom line.

Without women on IT development teams, technology pursuits may focus more on doing things faster, and less on doing new things. Without disabled persons on IT teams, technology advances may evolve further away from accessibility, as with graphical user interfaces. Without age diversity, rich knowledge is lost. Teams may find themselves reinventing or even missing successful development methodologies without the inclusion of aging IT workers. Culturally diverse IT teams are certainly necessary, as globalization becomes reality in today’s workplace. (Moody, et al., 2003, p. 68)

**Flaws in Measuring Training Effectiveness**

Reaction measurement is important as a relationship exists between the employees’ reactions, their ability to learn, and their ability to transfer the learning to the workplace (Holladay & Quiñones, 2005). A workplace with diverse individuals will have various variables that may skew the reactions to diversity education and as a result, will affect the learning and transferring
of attained knowledge. Individuals’ culture may cause differing interpretations of diversity-related tasks which will affect the manner in which they use the tools (Holladay & Quiñones, 2005). Research has shown that the attributes of an employee, such as gender, race, ethnicity, or other personal attributes, will influence the effectiveness of training (Goldstein & Ford, 2002). Employees are more likely to have a positive reaction to diversity training if the training deals with issues to which they can relate thus increasing the effectiveness of the training (Holladay & Quiñones, 2005). The hierarchical level of the individual within an organization influences the education the individual perceives as beneficial to his or her job (Goldstein & Ford, 2002). Individuals in management levels may perceive competitiveness and mitigation of legal actions as a benefit of diversity education, whereas lower-level employees may perceive the ability to positively interact with diverse individuals as a benefit (Holladay & Quiñones, 2005). Chrobot-Mason and Quiñones (2002) have asserted that failure to attain buy-in from employees will negate the success of diversity education in providing the benefits of diversity to the organization. In contrast, incorporating the benefits of diversity into diversity education will assist organizations in achieving stakeholder buy-in (Holmes, 2005).

**METHODOLOGY**

A Solomon four-group experimental design is the research design logically derived from the purpose and the theoretical framework of the study. A qualitative study was not appropriate for this study in that this study was not seeking to understand a phenomenon but to develop an explanation for the relationship between variables (Creswell, 2002). The Solomon four-group design mitigates the effects of using the same instrument for both pretest and posttest (Sproull, 2002). This study, in ascertaining if the participants increased cognition, required a comparison of two data collections before and after the training intervention as suggested by Kirkpatrick and Kirkpatrick (2006). This research design assisted in discovering the relationship between diversity training and equitable hiring practices.

**SELECTION OF SAMPLE**

A stratified random sampling procedure was used to assign the participants of the study to one of four groups: two treatment groups (TG1 and TG2) and two control groups (CG1 and CG2). Participants volunteering to participate in the study were assigned a random number in order to ensure anonymity. Research Randomizer, a web-based application was used to generate the random numbers. Demographic data were used to divide the population total into three strata: European Americans, African Americans, and other minorities. Percentages of each stratum were calculated by dividing the total of each stratum by the population total and multiplying the result
by 100. Anticipating that the African American and other minorities groups would be relatively small, the groups will be stratified.

Participants were proportionately allocated using the percentages of each group. The sample size was electronically calculated based on a 95% confidence level and a 5% margin of error. Based on the demographics of the population, a decision was made as to the number desired in each stratum. Research Randomizer was used to randomly assign the participants in each stratum to one of four groups.

**Instrumentation**

The study used three instruments to measure the effects of diversity training using the first three levels of Kirkpatrick’s model. Reaction (Level 1) was assessed using a scale developed by Choi et al. (2003). The learning and transfer of skills (Levels 2 and 3) was assessed by the Reaction-to-Diversity (RTD) Inventory and Workplace Diversity Survey (WDS) created by De Meuse and Hostager (2001; Hostager & De Meuse, 2002).

If training is to be effective, the participants must enjoy it, which means that the training environment must be conducive to learning if an increase of efficacy is to occur (Kirkpatrick & Kirkpatrick, 2006). The scale derived from Choi et al. (2003) provides the data needed to assist in ascertaining the effects of diversity training on self-efficacy and the effect of self-efficacy on the potential hiring practices of an individual.

The scale used to evaluate the reaction to the diversity training session has four subscales: supportive leadership, positive leader perception, open group climate, and positive group perception. The supportive leadership subscale ($\alpha = 0.78$) includes five items scored using a Likert-type five-point scale that measures the supportive behaviors of the trainer during the training session (Choi, et al., 2003). The positive leader perception subscale ($\alpha = 0.87$) consists of four items using a seven-point Likert-type scale to measure the important individual characteristics of the trainer such as knowledge, enthusiasm, and communication ability (Choi, et al., 2003). The open group climate subscale ($\alpha = 0.68$) uses four items and a five-point Likert-type scale to assess the group atmosphere and interaction patterns among training (Choi, et al., 2003). The positive group perception subscale ($\alpha = 0.93$) is composed of five items using a seven-point Likert-type scale measuring the participants’ overall attitudes toward their training group (Choi, et al., 2003).

The RTD Inventory is designed to embody both the positive and negative elements in each of the five aforementioned categories of diversity reactions. The inventory contains 70 words randomly
listed depicting a positive or negative response coinciding with the five categories (DeMeuse & Hostager, 2001; Hostager & De Meuse, 2002). Participants are required to choose all words that they frequently associate with diversity in the workplace. This inventory allows the researcher to “identify more accurately sources of resistance to and support for diversity” (DeMeuse & Hostager, 2001, p. 39). The identification of resistance and support gives insight into the learning attained by the participants and their ability to transfer that learning to the workplace (Kirkpatrick’s second and third levels).

The WDS consists of 20 items scored using a Likert-type five-point scale. Each of the 20 items contains two positive and two negative words from the five categories used in the R-T-D Inventory (emotional reactions, judgments, behavioral reactions, personal consequences, and organizational outcomes) (DeMeuse & Hostager, 2001).

**Data Collection and Analysis**

Prior to beginning the data collection process, a form requesting permission to use premises was sent to the appropriate person at the organization chosen for the study. Upon receipt of consent to perform the study, an administrative person from the organization was requested to assist with the data collection process. The administrative person was needed only should technical difficulties prevent the online administration of surveys. This person was provided a cover letter detailing the study and giving instructions regarding the survey instruments.

All surveys were administered online. Given the target population’s computer knowledge, the online administration of surveys was expected to positively affect the response rate and speed the data collection process. The WDS was administered at least one week prior to the subjects attending the diversity training session.

Prior to the administration of the WDS, the participants were requested to read and electronically sign an informed consent cover letter. In an effort to mitigate ethical concerns, passive tactics were not used (Cone & Foster, 2003). Therefore, participants (n = 37) failing to sign the informed consent letter were not allowed to participate in the study. Study participants were also required to complete a pre-study demographical survey. To maintain the integrity of the study, confidentiality was ensured by not requesting names or applying any other identifier to the survey instruments. The DTS and the RTD Inventory was administered immediately after the training session is completed.

The DTS and the WDS both employ Likert-type scales requiring the participants to choose the number that best reflects their views on the individual items. The WDS was readministered
20 days after the diversity training session was conducted. An e-mail reminder was sent to reinforce the return rate.

The instructions accompanying the RTD Inventory asked participants to choose all the words they frequently associate with workplace diversity. The word list served as a form for coding the data generated by the inventory. The positive and negative words were coded as +1 and -1 respectively. The data were entered into SPSS for Windows for analysis. All data collected was coded and entered into a statistical software package for analysis.

Data Analysis

The independent sample t-test, paired sample t-test, one-way analysis of variance (ANOVA), and two-way ANOVA was used to ascertain the effects of diversity training on equitable hiring practices. According to Sproull (2002), the use of a t-test is appropriate when one is comparing two independent groups chosen using random sampling from the population with unknown population variances. Similarly to the t-test, the use of ANOVA is appropriate when one is comparing multiple groups chosen using random sampling from the population. The two-way ANOVA was used to test for mean differences between groups (Group: Treatment or Control and Pre-test: yes or no) on a dependent variable. This allows each independent variable to be tested for its main effect on the dependent variable (Sproull, 2002). In addition the two variables collectively are tested for an interaction effect on the dependent variable (Sproull, 2002). Kirkpatrick and Kirkpatrick (2006) have suggested that knowledge and or attitudes be evaluated both before and after training intervention to ascertain if participants increased their cognitive levels. A difference between the posttest results of the groups receiving training and the posttest results of the groups not receiving training indicates the positive results of the training intervention.

RESULTS

Four research questions guided the research study. The purpose of this study was to use Kirkpatrick’s four level evaluation model to relate diversity training to equitable hiring practices for employees of two technology-based corporation. An alpha of .05 was used in all analyses to determine the statistical significance.

Data Findings for Research Question 1

R1. How does diversity training influence the hiring practices of organizations employing IT personnel?
The WDS was administered to the Treatment Group and Control Group. Although the survey contained 20 questions only questions 1, 3, 5, 9, 13, 15, and 17 were used to measure the equitable hiring practices. The results for the Treatment Group indicate a mean score of 30.19 ($SD = 2.38$) for those pretested (21) and a mean score of 22.82 ($SD = 3.67$) for those not pretested (22). The results for the Control Group indicate a mean score of 27.17 ($SD = 2.48$) for those pretested (23) and a mean score of 23.55 ($SD = 4.09$) for those not pretested (22).

The two groups (Treatment and Control) were compared. The results of the comparison of the data collected using the seven specific questions for the two groups were $t(43) = 7.88$, $p = .00$ (see Table 1).

Table 1
*t-test for R1*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>$t$</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDS_PostTest - WDS_PreTest</td>
<td>4.55</td>
<td>3.82</td>
<td>.58</td>
<td>7.88*</td>
<td>43</td>
<td>.00</td>
</tr>
</tbody>
</table>

* $p < .05$

A two-way analysis of variance 2 (Group: Treatment or Control) x 2 (Pre-test: yes or no) indicated a main effect of pre-test $F(1, 84) = 63.23$, $p = .00$ (see Table 2). The group x pre-test interaction was $F(1, 84) = 7.32$, $p = .01$ (see Table 2). The results of the ANOVA revealed no significant main effect for belonging to a particular group, $F(1, 84) = 2.74$, $p = .10$ (see Table 2).

Table 2
*Analysis of Variance for R1*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>754.81(a)</td>
<td>3</td>
<td>251.60</td>
<td>23.93*</td>
<td>.00</td>
</tr>
<tr>
<td>Intercept</td>
<td>59116.07</td>
<td>1</td>
<td>59116.07</td>
<td>5622.01*</td>
<td>.00</td>
</tr>
<tr>
<td>Group</td>
<td>28.80</td>
<td>1</td>
<td>28.80</td>
<td>2.74</td>
<td>.10</td>
</tr>
<tr>
<td>PreTest</td>
<td>664.90</td>
<td>1</td>
<td>664.90</td>
<td>63.23*</td>
<td>.00</td>
</tr>
<tr>
<td>Group * PreTest</td>
<td>77.01</td>
<td>1</td>
<td>77.01</td>
<td>7.32*</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>883.27</td>
<td>84</td>
<td>10.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>60659.00</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1638.08</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R^2 = .461$ (Adjusted $R^2 = .442$)

* $p < .05$
Data Findings for Research Question 2

R2. How does diversity training influence the self-efficacy of individuals working in IT organizations?

The DTS was administered to Treatment Group 1 (TG1) and Treatment Group 2 (TG2). The results for TG1(22) responses indicate a mean score of 72.64 ($SD = 11.56$). The results for TG2(22) responses indicate a mean score of 74 ($SD = 4.95$). The RTD Inventory was administered to both groups. Although the inventory measures five different dimensions, only the judgments and organizational outcomes dimensions are of concern in testing the hypothesis. The results for TG1(22) combined dimensional responses indicate a mean score of 3.68 ($SD = 4.49$). The results for TG2(22) combined dimensional responses indicate a mean score of 6.59 ($SD = 4.10$). The descriptive statistics for the combined dimensional responses in addition to individual dimensional responses of the RTD are presented in Table 3.

The two treatment groups (TG1 and TG2) were compared using their post-test scores. The results of the comparison of the data collected using total responses of the two treatment groups on the DTS and RTD were $F(1,42) = .26, p = .61$ and $F(1,42) = 5.04, p = .03$.

Table 3

Descriptive Statistics for R2 (RTD)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Judgments Dimension</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score Treatment Group 1</td>
<td>22</td>
<td>2.95</td>
<td>2.54</td>
</tr>
<tr>
<td>Treatment Group 2</td>
<td>22</td>
<td>3.14</td>
<td>2.62</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>3.05</td>
<td>2.55</td>
</tr>
<tr>
<td><strong>Organizational Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension Score Treatment Group 1</td>
<td>22</td>
<td>.73</td>
<td>3.04</td>
</tr>
<tr>
<td>Treatment Group 2</td>
<td>22</td>
<td>3.45</td>
<td>2.91</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>2.09</td>
<td>3.25</td>
</tr>
<tr>
<td><strong>Total RTD Scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Group 1</td>
<td>22</td>
<td>3.68</td>
<td>4.49</td>
</tr>
<tr>
<td>Treatment Group 2</td>
<td>22</td>
<td>6.59</td>
<td>4.10</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>5.14</td>
<td>4.50</td>
</tr>
</tbody>
</table>

Data Findings for Research Question 3

R3. How frequently do individuals who demonstrate higher levels of cognitive learning from diversity training embrace the concept of workplace diversity?
The WDS was administered to the Treatment and Control Groups. The results of the positive WDS questions for the Treatment Group (44) indicate a mean score of 33.50 ($SD = 6.13$) for those pretested (22) and a mean score of 32.95 ($SD = 5.22$) for those not pretested (22). The results for the Control Group (45) indicate a mean score of 33.48 ($SD = 4.96$) for those pretested (23) and a mean score of 34.27 ($SD = 5.25$) for those not pretested (22). The results of the negative WDS questions for the Treatment Group (43) indicate a mean score of 25.24 ($SD = 7.41$) for those pretested (21) and a mean score of 29.05 ($SD = 5.56$) for those not pretested (22). The results for the Control Group (45) indicate a mean score of 28.57 ($SD = 6.39$) for those pretested (23) and a mean score of 27.95 ($SD = 6.83$) for those not pretested (22).

The RTD was administered to the Treatment Groups and Control Groups. The results for the Treatment Group (44) indicate a mean score of 10.36 ($SD = 6.33$) for those pretested (22) and a mean score of 11.18 ($SD = 7.87$) for those not pretested (22). The results for the Control Group (45) indicate a mean score of 6 ($SD = 7.94$) for those pretested (23) and a mean score of 3.68 ($SD = 8.00$) for those not pretested (22). A two-way analysis of variance 2 (Group: Treatment or Control) x 2 (Pre-test: yes or no) using data from the RTD indicate a main effect of group, $F(1, 85) = 13.65, p = .00$. The results of the ANOVA revealed no significant main effect for pre-testing, $F(1, 85) = .22, p = .64$; and no significant interaction between belonging to a particular group and being pre-tested, $F(1, 85) = .95, p = .33$.

**Data Findings for Research Question 4**

**R4** What is the effect of self-efficacy on the hiring practices of individuals participating in diversity training at IT organizations?

The RTD was administered to Treatment Group 1 (TG1) and Treatment Group 2 (TG2) however; Treatment Group 1 was pretested. Although the inventory measures five different dimensions, only the judgments and behavioral reactions dimensions are of concern in testing the hypothesis. The results for TG1 (22) combined dimensional pre-test responses indicate a mean score of 2.41 ($SD = 3.92$); the post-test responses indicate a mean score of 5.77 ($SD = 3.50$) (see Table 4). The results for TG2 (22) combined dimensional responses indicate a mean score of 5.59 ($SD = 4.08$).

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Descriptive Statistics for R4 (Treatment Group 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judgments Dimension Score (PreTest)</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>
The pre-test scores of TG1 were compared with the post-test scores following the diversity training and time lapse (see Table 5). The results of the comparison of the data collected using the combined dimension score was $t(21) = 2.88, p = .01$ and $t(21) = 7.73, p = .00$.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judgments Dimension Score (PreTest)</td>
<td>-.39</td>
<td>21</td>
<td>.71</td>
<td>-.27</td>
</tr>
<tr>
<td>Judgments Dimension Score (PostTest)</td>
<td>5.47*</td>
<td>21</td>
<td>.00</td>
<td>2.96</td>
</tr>
<tr>
<td>Behavioral Reactions Dimension Score (PreTest)</td>
<td>4.29*</td>
<td>21</td>
<td>.00</td>
<td>2.68</td>
</tr>
<tr>
<td>Behavioral Reactions Dimension Score (PostTest)</td>
<td>3.84*</td>
<td>21</td>
<td>.00</td>
<td>2.82</td>
</tr>
<tr>
<td>Total RTD Scores (PreTest)</td>
<td>2.88*</td>
<td>21</td>
<td>.01</td>
<td>2.41</td>
</tr>
<tr>
<td>Total RTD Scores (PostTest)</td>
<td>7.73*</td>
<td>21</td>
<td>.00</td>
<td>5.77</td>
</tr>
</tbody>
</table>

* $p < .05$
The scores of the two groups were compared following the diversity training and time lapse. The results of the comparison of the data collected using the combined dimension scores of the pre-test and post-test were not statistically significant.

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The difference in the pre-test means and post-test means indicate a positive change in participants that participated in the diversity training intervention. However, the results of the statistical analysis indicate no significance between diversity training and the establishment of a correlation to hiring practices. Likewise, the results indicate no significant difference in the influence of diversity training on an individual’s self-efficacy. No significance exists in the frequency of individuals embracing a workplace diversity concept as a result of deriving satisfaction from diversity training. The effect of self efficacy on the hiring practices of those that participate in diversity training was found to not be significant. Although the results indicate no significance as it relates to the four research questions, the overall conclusion must include the analysis of the hypotheses.

The study’s findings reveal that diversity training impacts the behavioral practices of participants. The study showed that training is to be considered effective when the training is satisfactorily measured using Kirkpatrick’s 4-level model (Kirkpatrick & Kirkpatrick, 2006). This is vital to the success of organizations given that many organizations rely on training as a preferred method to manage their diversity (Wentling & Palma-Rivas, 2000). Kirkpatrick’s model (Kirkpatrick & Kirkpatrick, 2006) is supported by the findings of this study.

Participants’ reactions to the diversity training were quantified and shown to be slight but significant. One must note that the reaction or first level of Kirkpatrick’s model does not attempt to attribute any benefits achieved to the training intervention (Kirkpatrick & Kirkpatrick, 2006). However, participant learning or the model’s second level, seeks to determine if the training does cause an increase in cognitive knowledge. The learning of participants as quantified by the results of this study show an increase in positive and decrease of negative diversity responses. This indicates that cognitive learning increased following the training intervention. The result analysis of the study shows that a change in behavior, which is the model’s third level, occurs in participants that participate in diversity training. However, the behavioral change is slight and not significant. The ability to transfer acquired knowledge to the workplace by diversity training participants is supported by statistical analysis of the study’s data. This supports Kirkpatrick’s fourth level, which is most important to organizations as they seek to attain specific results as a direct result of training (Galloway, 2005).
Recommendations for Future Research

In an attempt to increase the potential positive impact of this study’s findings to an organization four recommendations are suggested for future consideration. The recommendations suggested focus on the ability of diversity training to impact the facilitation of a diverse workforce positively. These recommendations include recommendations for action by key stakeholders within an organization, along with recommendations for further study.

This study utilized an online delivery of the diversity training. Although this method may have resulted in a positive outcome it would be interesting to assess the impact of a different delivery method on the results. Therefore, it is recommended that the study be conducted with the four-groups stratified based on the method of training delivery as oppose to stratification to assure groups mirror the demographical makeup of the organization. The groups could be stratified based on those receiving online training; e-mail based training, facilitated classroom training, and peer-lead interactive training.

It is recommended that the desired results of the training intervention be validated using a method that easily quantifies the results in a manner more useful to participants and organizational leaders. It is suggested that participants be given hiring scenarios to test the application of knowledge attained in training. The results of the participants’ scenario driven actions will allow the leaders to see readily the impact of the training on desired behavior. These scenarios will also potentially enforce the participants’ self-efficacy by showing him or her that they can successfully transfer the learning to the workplace.

It is recommended that the study be conducted using a different sampling. Stratification based on education, department, length of time with the organization, or other distinguishing characteristic would provide more perspective on the effects of training. The same is true if a different population is used for the study. It would be interesting to use and compare organizations that are known for their diversity initiatives to those that have diversity problems.

Contributions to New Knowledge in HRD

This study proves that diversity training deemed effective based on Kirkpatrick’s 4-level model is beneficial to an organization. Statistical analysis supports all four of the model’s levels. Although the findings of this study may be used in any context requiring training intervention, an organization’s leaders can apply the favorable results of the study to promote, support, and or sustain diversity initiatives.
This study highlights the impact of diversity training to increase the awareness of the benefits derived from employing a diverse workforce. As shown by the study, individuals within an organization can undergo behavior modification resulting in positive results to the organization. This is important to IT organizations given the potential global ramifications as seen in either the organization’s customer base or collaborative efforts.

An organization must possess the ability to relate to every individual affected by the organization’s actions. Regardless of whether a customer, employee, or the community it operates within, a convenience of a genuine appreciation of the individual must be conveyed by the organization. This can be difficult for an organization given the ever-changing demographics of the United States and the shift towards global operations. However, given this study’s ability to demonstrate that diversity training can increase the awareness of the benefits of diversity, leaders can be confident that operating in a diverse environment such as globally will not negatively impact the organization. In fact, the study supports the assumption that effective diversity training will provide an advantage to leaders of a global organization or one seeking to shift to global operations.
REFERENCES
Emerson, M. O., Kimbro, R. T., & Yancey, G. (2002). Contact theory extended: The effects of prior racial contact on current social ties. Social Science Quarterly (Blackwell Publishing Limited), 83(3), 745-761. Retrieved from EBSCOhost database


As the nation’s workforce becomes transformed by the growth of protected groups, diversity management has become an essential tool for human resource professionals. Numerous initiatives at local, state, and national levels have provided information that promotes awareness and assists in the attainment of specific knowledge and skills about various cultures. Awareness and knowledge about others, however, are simply not enough to advance organizational diversity goal; individual development issues are also important. To assist in the understanding of individual cultural adaptability, the Weiss-Lyon Scale has been developed. This study presents initial construct validation finding of the instrument, demonstrated through a series of correlations between scores reported on the WLS and personality measures reported through scores on the Revised NEO Personality Inventory-Revised (NEO-PI-R). In this study, it was determined that WLS scores appropriately correlate to NEO-PI-R score in areas related to ideas, feelings, actions and trust. There was no demonstrated relationship between WLS constructs and extraversion, so being outgoing in social environments does not specifically provide an advantage in becoming culturally adaptable.

Organizations are increasingly recognizing the importance of each individual’s ability to perform effectively in different environments and cultures (Carpenter, 2001; Ilgen & Pulakos, 1999; Montagliani and Giacalone, 1998). The highly male-dominated workforce of the 70s has been replaced by an increasing number of women and people of color (Ivancevich, 2001; Mathis & Jackson, 2000). Generation X members are vying for jobs held by aging baby boomers, who are living and working longer than those who preceded them (Ivancevich, 2001; Flynn, 1996). Further, the shift from manufacturing to service-oriented businesses, global trade, and the increasing volume and velocity of issues accelerated by technology, also, mean that employees must demonstrate flexibility and responsiveness in their interpersonal skills (Paulhus & Martin, 1988).

Because experiences vary widely among today’s employees, it is essential that human resource development (HRD) professionals recognize the importance diversity development, as well as the effect of long-term biases and prejudices, to the organizational environment (Baldwin, 1995). For socialization and other development methods to be effective in advancing organizational diversity goals, it is critical that members understand themselves and how they relate to others (Daley, 2002; Tyler,
Further, Anastasi and Urbina (1996) indicate that use of psychometric techniques in the development of self-reporting instruments to measure attitudes has been successful in predicting behavioral outcomes. There are, however, few such instruments available for the purpose of measuring attitudes related to cultural adaptability constructs.

One such instrument, described during the 2002 International Conference for Advances in Management, is the Weiss-Lyon Scale (WLS) (International Conference, 2002). Although reviewers and discussants agreed that the WLS has potential to achieve its stated purpose of providing a self-reporting instrument designed to assess individual readiness to change attitudes related to essential diversity constructs, it was determined that further research needs to be conducted to assess the instrument’s construct validity. The problem is that no such study has been provided to date. The purpose of this study, therefore, is to validate the Weiss-Lyon Scale, as a self-reporting instrument designed to assess individual readiness to change attitudes related to essential diversity constructs.

Diversity as a Strategic Initiative

Given the ever-expanding reaches of the global economy and the increasing diversity within today’s organizations, it is clear that employees are being required to perform in a wide variety of cultural environments (Carpenter, 2001; Ilgen & Pulakos, 1999; Montagliani and Giacalone, 1998). Further, the shift from manufacturing to service-oriented businesses has created an environment where employees must demonstrate flexibility and responsiveness in their interpersonal skills (Paulhus & Martin, 1988). Individuals who are open to these circumstances and are willing to adapt, are in demand because they are more likely work effectively with others under new conditions (Pulakos, Arad, Donovan, & Plamondon, 2000; Gerner & Perry, 2000). This is particularly true for employees who work in teams and with diverse customers (McKenzie & Lee, 1998).

These conditions have given rise to the consideration of diversity management as a strategic issue for many organizations (Daley, 2002; Gomez-Mejia, Blakin & Cardy, 2001; Harris & Moran, 1996; Robinson & Robinson, 1989). As a major component of most diversity management programs, diversity development is seen as, both, a source of competitive advantage (Noe, 2002; DeFoe, 2000) and an investment in human capital (Pfeffer & Sutton, 2000; Loden and Rosener, 1991; Odiorne and Rummier, 1988). In fact, Training magazine’s “Industry Report 2000” indicates that collective training costs for organizations of 100 or more employees were estimated at $62.5 billion in 1999 and $54 billion in 2000. According to Tyler (2000), however, employers would like to increase their ROI, since these same organizations can only show a return on approximately 10% of their investment (p. 94).

To improve ROI, through changing behaviors on-the-job, human resource development (HRD) professionals must examine the content of their diversity programs.
Most will find that their traditional diversity development sessions are designed to describe legal and organizational issues (i.e., affirmative action, equal employment opportunity, backlash, administrative and distributive justice, etc.), various individual dimensions (e.g., culture, age, race, gender, etc.) and differences among people, with particular focus on biases and prejudices associated with those differences (DeSimone, Werner & Harris, 2002; Bucher, 2000; Harris & Moran, 1996; Gentile, 1995). Chao, O’Leary-Kelly, Wolf, Klein, & Gardner (1994) proposed that adapting to a different culture involves expanding learning to include the goals and values, history, politics, and power structure of that culture, as well.

**Diversity Learning Environment**

The learning environment for diversity development is a dynamic and complex set of conditions that supports improved individual and organizational performance (Goldstein and Ford, 2002; Merriam and Caffarella, 1999; Odiorne and Rummier, 1988). Because performance has been a critical organizational issue for years, the literature contains generations of studies conducted to determine what (content) and how (process) performance can be improved (Noe, 2002; Henderson, 2000; Cross, 1981). From those contributions, it can be surmised that, as a construct for learning, performance may be described in the following formula:

\[ P = (SKAxMxA)(learning \ environment) \]

Skill, knowledge and ability, coupled with individual motivation and attitudes represent internal aspects of performance and, therefore, they are controlled by the training participant. The learning environment is an external element, influenced by the individual, but generally controlled by the trainer. Performance formula elements are mathematically depicted by multiplication to indicate that performance is a function of the weakest link in the process; strength in any one of the areas will not make up for excessive weaknesses in any other area. It follows, then, that positively influencing the training environment is an extremely important consideration for learning to take place, but it alone is not enough to produce improved performance. Training participants must be willing and able to apply the new information to effectively perform their learning activities and to transfer that learning to daily activities (Boucher, 2000; Pfeffer and Sutton, 2000). For purposes of this study, it is assumed that organizational selection and staffing processes are designed to determine skill, knowledge, ability and motivation to process assigned work activities (Henneman, Judge and Henneman, 2000). The focus here, therefore, is on attitudes.

Attitudes are defined in various ways in the literature, but tend to be described as positive or negative behavioral manifestations resulting from one’s interpretation of information framed within a values set (DeSimone, Werner and Harris, 2002; Blanchard and Thacker, 1999; Ryckman, 1993; Davies, 1981) Three learning components can be
interpreted from the definitions of attitudes: knowledge (cognitive), emotional (affective), and action (behavior) (Davies, 1981); all three are essential if transfer of training is to take place (Noe, 2002).

Traditional diversity development programs seek to describe legal and organizational issues (i.e., affirmative action, equal employment opportunity, backlash, administrative and distributive justice, etc.), various individual dimensions (e.g., culture, age, race, sex, etc.) and differences among people, with particular focus on biases and prejudices associated with those differences (DeSimone, Werner and Harris, 2002; Bucher, 200; Harris and Moran, 1996; Harvey and Allard, 1995; Gentile, 1995; Wexley and Latham, 1991). Although diversity development processes may be painful to many, they do generally reveal hidden assumptions that individuals have about others and allow new understanding (Nelson and Quick, 1995; Wurzel, 1998). Understanding leads to openness, which facilitates trust (Cook and Hunsaker, 2001) and improved listening skills—core constructs for building positive relationships and effectively working together in teams (Adler and Towne, 1998).

Knowledge about other cultures, however, is simply not enough to make a person open and adaptable. Personal values and an orientation that helps one to be willing and able to adjust to change are also important. Salyer (1993) developed a model that indicated six stages of cultural adaptation including: ignorance, rejection, approximation, awareness, approval, and versatility. Pulakos, et. al. (2000), also point out the insufficiency of knowledge alone, since there also has to be a full understanding and willingness to behave in accordance with the culture’s expectations, rules, and structures. Chao, O’Leary-Kelly, Wolf, Klein, and Gardner (1994) proposed that adapting to a different culture involves learning the language, goals and values, informal goals and values, history, politics, and power structure of that culture.

Learning Theory and Diversity Mindfulness

These concepts are fundamentals of social learning theory developed by Piaget (1972), Bandura (1986) and others (Taylor, Russ-Eft & Chan, 2005). Social learning frames individual development in a process orientation focused on knowledge acquisition and social development, which are centered on engagement with others. This is a particularly important aspect of diversity development programs. By valuing others as role models in social contexts, learners become aware of new information and retain it through rehearsal, integration and feedback. Social learning encourages inclusiveness in discussions involving critical analysis of learning concepts, such as culture and role understanding. Further, it recognizes the complexities and opportunities that arise when complex viewpoints are non-judgmentally engaged in the present moment.

The process of integrating these essential elements can be referred to as “mindfulness” (Langer & Moldoveanu, 2000). A recent study into the significance of the
mindfulness construct states that it integrates personality and cognition to produce a “preferred way of thinking” (Kostanski & Hassed, 2008). From a diversity development perspective, the integration of role understanding, inclusiveness, culture and non-judgmental discussion of diversity issues, may be labeled “diversity mindfulness” (Russo & Vaz, 2001).

Clearly, diversity development programs can benefit from including a diversity mindfulness process to advance social learning. For the learning to be most effective, it is necessary that HRD professionals develop learning environments where individual understanding and diversity appreciation support open, non-judgmental conversations and experiences. Further, diversity trainers must remember that learning takes time (Wexley & Latham, 1991; Odiorne & Rummier, 1988; Davies 1981). In an effort to cover content quickly, insufficient activities and feedback are, too often, provided to help participants understand how the information affects them and those with whom they come in contact, which are essential elements of effective social learning and diversity development (Tomlinson-Clark, 2000).

Beyond the learning context and time, individual factors, such as high or low ego adaptability, also affect the breadth of interpersonal engagement (Aronoff, Stollak, & Woike, 1994), so important to social learning. Participants with a high degree of ego adaptability are more likely to demonstrate emotional and interpersonal engagement in social situations. Along with this, individuals who are open to and exposed to diversity will continuously modify their opinions of self and others, as well as their philosophy of life (Baruth & Manning, 1999). Further, their ability to accurately interpret information will help these individuals to arrive at appropriate meanings derived from others’ behaviors (Alder and Towne, 1998). By utilizing appropriate methods and instruments, diversity development programs can assist participants in evaluating their emerging understanding.

Method

Instruments

Weiss-Lyon Scale. Based on literature review and pilot testing, the Weiss-Lyon Scale was designed as a self-scoring instrument to be used in diversity development activities and used to reflect the individual’s degree of openness, attachment to traditions, and willingness to adapt in different situations. The latent cultural adaptability scale includes four antecedent subscales: ideas (openness to new and different ideas), feelings (emotional sensitivity and empathy), actions (willingness to try new and different things), and trust (faith in the motives of others and sense of security). An original pool of 125 items was developed and reviewed by the authors for redundancy and relevance to the cognitive, affective, and behavioral dimensions of openness to cultural diversity; 70 items
were retained for the initial pilot testing of the instrument. Following pilot testing, the list of items was further reduced to 48.

**NEO PI-R.** To provide an appropriate basis on which to measure the WLS construct validity, the authors reviewed several well established psychological tests including the 16PF, fifth edition (IPAT, 1993) and the NEO PI-R (Costa & McCrae, 1991). Addressing similar attributes, both the 16PF and NEO PI-R measure global personality characteristics. Because the NEO PI-R is commonly used to measure the Big Five personality traits for human resource management purposes (Heneman & Judge, 2009), it was selected as the basis for construct validation studies for the WLS. The constructs measured by the NEO PI-R are: neuroticism (emotions), extraversion (sociability), openness (intellectual curiosity), agreeableness (cooperative), and conscientiousness (impulse-control) (PAR, 1991). Of these five, three appear to be directly linked to WLS constructs, as provided in Table 1.

Table 1
**WLS Subscales and NEO PI-R Scales**

<table>
<thead>
<tr>
<th>WLS subscales</th>
<th>NEO PI-R scales</th>
</tr>
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<tbody>
<tr>
<td>Ideas</td>
<td>Openness</td>
</tr>
<tr>
<td>Feelings</td>
<td>Neuroticism</td>
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<tr>
<td>Actions</td>
<td>Openness</td>
</tr>
<tr>
<td>Trust</td>
<td>Agreeableness</td>
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</tbody>
</table>

**Participants**

Between 2000 and 2008 and as part of the requirements for graduate psychology and human resource management classes in a non-traditional public institution, 56 students completed the Weiss-Lyon Scale and the NEO PI-R. Females represented 71% of the respondents; 29% were male. Although the purpose of these activities was not to validate the WLS, the resulting data were used in this content validation study.

**Procedures and Analysis**

Data elements were paired for WLS and NEO PI-R scores and names were converted to nominal identifiers. Pearson correlation statistics were used to determine the relationship between WLS constructs and NEO PI-R personality dimensions. SPSS v.16 was used to calculate correlations between WLS and NEO-PI-R scales. Expected
relationships between the scales were found, and the findings provide important information regarding construct validity of the WLS.

Results

Table 2 presents the significant results of the analyses between the NEO-PI-R and WLS subscale scores.

Table 2
Results of WLS and NEO PI-R Scales Comparisons

<table>
<thead>
<tr>
<th>WLS subscales</th>
<th>NEO PI-R scales</th>
<th>Pearson r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas</td>
<td>Openness</td>
<td>.687 (p&lt;.01)</td>
</tr>
<tr>
<td>Feelings</td>
<td>Neuroticism</td>
<td>.581 (p&lt;.01)</td>
</tr>
<tr>
<td>Actions</td>
<td>Openness</td>
<td>.293 (p&lt;.05)</td>
</tr>
<tr>
<td>Trust</td>
<td>Agreeableness</td>
<td>.482 (p&lt;.01)</td>
</tr>
</tbody>
</table>

The NEO-PI-R Openness scale was positively correlated with the WLS Ideas scale (r = .687, p < .01) and the WLS Actions scale (r = .293, p<.05). Openness to new experience was found to be consistent with being imaginative, curious, and unconventional. Being an open individual leads to more interest in others, which is desirable regardless of the cultural background of the individuals involved.

The WLS Feelings scale was positively correlated with the NEO-PI-R Neuroticism scale (r = .581, p < .001). Being too emotionally sensitive may be related to less-than-desirable attributes, such as being emotionally unstable, unreliable, or indolent. While it is beneficial in communicative environments for individuals to connect emotionally, in varying degrees, and to be empathetic with others, it is usually necessary for adults to remain in control of their feelings. At the other extreme, individuals who are emotionally distant will have difficulty establishing appropriate interpersonal relationships and communications processes will likely be impaired. Therefore, it is best that neither a low nor a high score be reported on the WLS Feelings scale.

The WLS Trust scale was positively correlated with the NEO-PI-R Agreeableness scale (r = .482, p < .01). Faith in the motives of others and a sense of security were found to be related to sympathy, altruism, and an eagerness to help. While it may appear that scoring high in Trust would be best, Costa and McCrae (1992) indicate that neither extreme of this dimension is desirable. This is because at the lower end of the Trust scale, individuals tend to be skeptical, antagonistic, and egocentric; higher-end scores, indicate
extreme cooperativeness, agreeableness, and dependence on others. This may lead to a failure to adhere to personal values and may create organizational members who join the common crowd instead of stepping forward with new ideas. Good interpersonal skills and the ability to focus on the other’s needs and worldviews are essential tools in creative more adaptive work relationships; however, maintaining professional standards and codes of ethics are also critical.

No significant relationships were found between the NEO-PI-R Extraversion scale and any of the WLS scales. Being outgoing, optimistic, energetic and preferring to be around large groups of people had no relationship to the ability to adapt in culturally diverse situations. It should be noted that being introverted is not being socially shy or unhappy, but rather being independent and reserved (Costa & McCrae, 1992). From this finding, it may be reasonable to assume that being extraverted does not give a person an advantage in being culturally adaptable over those who are introverted. Further, no significant relationships were found between the NEO-PI-R Consciousness scale and any of the WLS scales.

Conclusion and Recommendations

In summary, the results of this study provide evidence that sustain initial levels of construct validity for the Weiss-Lyon Scale and support its use as an appropriate tool in diversity development programs. The instrument is available freely on-line at http://www.tarleton.edu/Faculty/blyon/ and then click on “Take the Weiss-Lyon Scale, click here.” Because of limitations regarding small sample size, unequal gender representation, and reliance on quasi-experimental group members as participants, however, future research on this topic should be conducted to assess critical convergent and discriminant data, which are essential in determining the construct validity of the instrument.
REFERENCES


A TIME FOR DEVELOPING NEW MANAGEMENT THEORY: EXAMPLES OF GOAL-SETTING AND STRATEGY*

Bruno Dyck, University of Manitoba, bdyck@ms.umanitoba.ca
Mitchell J. Neubert, Baylor University, Mitchell_Neubert@baylor.edu

ABSTRACT

This paper responds to on-going calls to develop alternative management theory that is a better fit for the complexities of our time. In particular, the paper points to the merit in developing what we call Multistream management theory and practices that parallel what we call Mainstream management theory and practices. Multistream theory is based on a variation of virtue theory that seeks to achieve multiple forms of well-being for multiple stakeholders. Mainstream theory is based on a variation of consequential utilitarianism that has a materialist-individualist focus. To illustrate our approach, we develop Multistream variations of two of the most influential theories in the literature—goal-setting theory and strategy theory. Implications for ethics, theory and practice are discussed.

INTRODUCTION

Management scholars and educators are becoming increasingly concerned about the state of management practice and its appropriateness for modern times (e.g., Dyck & Schroeder, 2005; Ferraro, Pfeffer & Sutton, 2005; Giacalone & Thompson, 2006; Hamel, 2007). The reasons for concern are as broad as those who on moral grounds call for a new approach that will increase social justice (e.g., Moore, 2008), to those who with an eye to consequences for future generations call for approaches that are sustainable (e.g., McCardy & Shrum, 2001), and to those who argue that the old modes of operation have outgrown their usefulness for modern economic times (e.g., Hamel, 2007, 2009). Despite these concerns the dominant approach to teaching management continues to promulgate a form of management practice birthed and refined during the industrial revolution (Hamel, 2009). Even so, left unchecked, the unspoken materialist and individualist assumptions of mainstream management theory and practice are self-perpetuating.

Most would agree that management theory and practice consistent with this mainstream moral-point-of-view—which is evident in the desire to maximize productivity, efficiency and profitability—has coincided with unprecedented productivity and financial wealth. However, this materialist-individualist moral-point-of-view also has shortcomings, as it may diminish people’s overall well-being and happiness (Kasser, 2003), disrupt social well-being (Rees, 2002), encourage corporate scandals (Giacalone & Thompson, 2006), and be harmful to the ecological
environment (McCarty & Shrum, 2001). Evidence suggests that a decreasing number of people, both in the U.S. and around the world, ascribe to a materialist-individualist moral-point-of-view (Etzioni, 2001; Giacalone, 2004).

Thus, although the dominant materialist-individualist (Mainstream) management theory may indeed maximize organizational productivity and financial well-being, a growing chorus of voices is pointing to the merit of developing alternative management theory and practice. Rather than simply pointing out the possible shortcomings of Mainstream management, scholars should provide examples of what alternative management theories might look like (e.g., Alvesson & Willmott, 1992; Bennis, 2000; Ghoshal, 2005; Giacalone & Thompson, 2006; Mintzberg, Simons, & Basu, 2002; Patriotta & Starkey, 2008). Scholars recognize the need to develop alternative management theories that are based upon different ethics, values and moral-points-of-view (e.g., Weber, 1958; Calas and Smircich, 1999). In particular, there is some agreement that Mainstream management theory is consistent with a particular variation of utilitarian consequentialism and that an alternative approach to management should be developed that is based upon virtue theory (e.g., Dyck & Schroeder, 2005; MacIntyre, 1981; Melé, 2007; Moore, 2008; Roca, 2007). In this paper we will develop what we will call a Multistream approach to management, one which seeks to balance multiple forms of well-being (e.g., material, social, physical, intellectual, spiritual, ecological, etc.) for multiple stakeholders (e.g., owners, members, suppliers, competitors, neighbors, future generations, etc.) and is fitting for our times.

The rest of the paper proceeds in three parts. First, we review the literature that provides the two basic arguments that our paper builds upon and responds to: 1) there is merit in developing Multistream management theory (based on virtue theory), and 2) there is merit in developing such theory in a way that it parallels Mainstream management theory. Second, we identify and briefly review two of the most influential Mainstream theories in the management literature—goal-setting theory and generic strategy theory—and then proceed to develop what a Multistream variation of these two theories would look like. Third, we discuss the implications of our paper for both management theory and ethics.

DEVELOPING MULTISTREAM MANAGEMENT THEORY THAT PARALLELS ITS MAINSTREAM COUNTERPART

The Need for Alternative Management Theory

Growing concern about focusing on only one approach to management—and in particular about the materialist-individualist self-fulfilling prophecies that underpin Mainstream management theory and practice—has prompted calls for scholars to develop theories about
alternative approaches to management. Over a century ago, Max Weber (1958; orig. 1904) argued that Mainstream management is characterized by its materialist-individualist emphasis, and called for the development of alternative theories to overcome its shortcomings. Using Weberian language, a materialist-individualist “substantive rationality” (which is consistent with a particular moral-point-of-view that Weber called the Protestant ethic) has given rise to a specific “formal rationality” evident in Mainstream management theories which has encaptured society in an “iron cage.” Weber argued that escape from the iron cage could come if scholars were to develop what we call Multistream theory that is “formally rational” according to a different “substantive rationality.”

Alasdair MacIntyre (1985) revived these concerns in asserting that commercial organizations tend to pursue in excess the external goods of profitability and power by means of managerial theories and practices that are regarded by many as morally neutral. In his critique, he identifies managers as the central characters in the pursuit of external goods and asserts that managers pursue these ends without engaging in moral contemplation because the ends are viewed as given, and the only legitimate concern of managers is in the efficient application of knowledge and practices toward those ends (MacIntyre, 1985). This unquestioned materialist-individualist approach is reinforced in Anglo-American capitalist societies by financial markets and corporate governance systems that focus almost exclusively on shareholder value (O’Sullivan, 2003). An obfuscation of the morality of management theory has resulted such that managers either do not or cannot bring themselves to question the morality of their practices, which in reality are value-laden (Moore, 2008).

More recently, Ferraro, Pfeffer and Sutton (2005) note with concern that the assumptions of economic self-interest have become a self-fulfilling prophecy. They lament that we have become a society where altruistic acts, in order to be deemed morally legitimate, must be justified in self-interested terms. Ghoshal (2005) concurs that all management theory is value-laden, and he argues that mainstream management theory and practice has given too much attention to negative self-regarding behavior. In order to help practitioners build “delightful organizations” (Bennis, 2000), scholars need to develop and teach them the “theories that describe how they can do so” (Ghoshal, 2005: 87). Other leading scholars echo Ghoshal’s call for the development and teaching of alternative approaches to management theory and practice (e.g., Donaldson, 2005; Kanter, 2005; Mintzberg, 2005; Pfeffer, 2005). Specifically, Giacalone and Thompson (2006: 267) call for the development of management theory based on a different moral-point-of-view than “materialism and self-interest.” Our Multistream perspective, based on a variation of virtue theory, is one example of such an alternative moral-point-of-view.

Of course, we are not suggesting that Multistream management theory is the first or only alternative to a Mainstream approach. Indeed, an increasing number of scholars have begun to
develop theory along the lines of a Multistream approach. Important contributions come from areas such as corporate social responsibility theory (Aguilera, Rupp, Williams, & Ganapathi, 2007; Davis, 1973), stakeholder theory (Clarkson, 1995; Freeman, 1984, 1999; Jones, 1995), corporate citizenship (Matten & Crane, 2005), corporate social performance (Turban & Greening, 1996; Wood, 1991), positive organizational scholarship (Cameron, Dutton, & Quinn, 2003), servant leadership (Greenleaf, 1977), social entrepreneurship (Dees, Emerson, & Economy, 2001), stewardship (Block, 1993; Davis, Schoorman, & Donaldson, 1997), and virtue (Beadle & Moore, 2006, Cameron, 2006; Moore, 2002, 2005a, 2005b, 2008; Weaver, 2006).

Conceptual Basis for Multistream Theory and Practice

Multistream management theory is a meta-theory in that it subsumes a variety of other related theories, but its most prominent theoretical basis is virtue. E.F. Schumacher (1973: 248-249) argued that there are many classic moral-points-of-view that could be used to underpin an alternative to the Mainstream approach, but “there is perhaps no body of teaching which is more relevant and appropriate to the modern predicament than the marvelously subtle and realistic doctrines of the Four Cardinal Virtues – prudential [practical wisdom], justitia [justice], fortitudo [courage], and temperentia [self-control].”

The conceptual basis for Multistream theory and practice was initially developed by Dyck and Schroeder (2005). Dyck and Schroeder developed an alternative moral-point-of-view by identifying a set of underlying virtuous assumptions that contrast with a conventional or Mainstream materialist-individualist approach to management. The moral philosophy underlying the Mainstream approach to management is consistent with a materialist-individualist variation of utilitarian consequentialism, in which two guiding assumptions are paramount: 1) material wealth is the most appropriate end for business, and 2) the best means to maximize material wealth is to emphasize individual self-interests (Dyck & Schroeder, 2005; Patriotta & Starkey, 2008). In contrast, a Multistream virtue-based alternative is relatively less materialistic and individualistic in its two assumptions: 1) material wealth is only one of many appropriate ends for business (i.e., multiple forms of well-being are appropriate ends), and 2) the best means to maximize multiple forms of well-being is to take into account the interests of multiple stakeholders (Dyck & Schroeder, 2005; Patriotta & Starkey, 2008). The Multistream approach does not ignore the importance of financial well-being nor does it disregard the interests of shareholders. However, compared to the Mainstream approach, a Multistream approach places more emphasis on balancing a wider variety of forms of well-being for a greater variety of stakeholders.

Multistream management theory and practices take the position that managers cannot abdicate moral responsibility for the ends they pursue or the means by which ends are achieved.
Instead, managers should be concerned with the development and perpetuation of practices that result in internal goods related to meaningful work and excellence and give their attention to ensuring a sustainable pursuit of good purposes for the organization (which may include but is not restricted to the external good of profitability) (Moore, 2008). Managers are moral agents in promoting virtue or vice (Flynn, 2008; Moore & Beadle, 2006; Weaver, 2006). In this sense, management is not the hard science of absolute principles as found in mathematics that many “enlightened” thinkers have hoped for (McCloskey, 2008). In contrast, virtue is “concerned with good character, and with taking account of the situation and the specific people involved, giving a role to good judgment as opposed to just following the rules” (Fortin & Fellenz, 2008: 419). As such, Multistream management theory and practices based in virtue theory entails exercising moral imagination in exercising character; it is not simply following calculations for maximizing materialist-individualist ends.

Developing Multistream theories that parallel their Mainstream counterpoint

At its core, our paper focuses on how underpinning assumptions and values influence theory. “As Weber pointed out, the value-laden nature of assumptions can never be eliminated. Yet if a theory is to be properly used or tested, the theorist’s implicit assumptions must be understood. Unfortunately, theorists rarely state their assumptions” (Bacharach, 1989: 498). This shortcoming is also evident when Calas and Smircich (1999: 665) lament that the “ethics and values” underpinning conventional theory remain hidden. They call for readers to “do theory differently” and conclude by asking: “Under whose ethics, and under whose values, will we continue the practices of our institutions?” (Calas & Smircich, 1999: 666). Our paper is a direct response to these important issues because we illustrate how to build Multistream theory by explicitly recognizing the value-laden assumptions that underpin, inform, and shape our theories.

We do this by developing alternative theory that serves as a complementary counter-point to two of the most-influential theories in the discipline. Unlike most research, which tries to make existing “theory better by increasing its internal consistency, often at the expense of limiting its scope” (Van de Ven, 1989: 487), we seek to improve theories more generally by embracing paradox and expanding scope. In our case, that paradox comes from observing that the way to optimize Mainstream performance (e.g., task performance, competitive advantage, profits) may be qualitatively different than its Multistream counterpart (e.g., multiple forms of well-being for multiple stakeholders).

In doing so we are responding to those who call for theory to be developed that exhibits “dualistic, paradoxical” thinking outside the dominant paradigm and thereby constructively “breaks down the prejudices inherent within any set of truth claims” (Elsbach et al, 1999: 629). Our approach offers similar benefits to “multiparadigm inquiry” (Lewis & Grimes, 1999)
because it: 1) reveals “the impact of theorists’ underlying, often taken-for-granted, assumptions on their understandings of organizational phenomena” (673); 2) treats differing perspectives as “‘debating voices,’ arguing their views in search of common ground.” (675-76); 3) “contributes a midpoint between dogmatism and relativism” (672); and 4) “offers tremendous yet unrealized theory-building potential” (672 and 673) as it enables “theorists to build theory more attuned to the intricacy and paradoxes of organizational life” (686). Our approach helps theorists to “recognize that theory building is not solely a methodical, rule-bound process but also an ideological, political, and moral engagement through which they make and remake themselves” (Lewis & Grimes, 1999: 686; emph. added).

“I do admit that at any moment we are prisoners caught in the framework of our theories; our expectations; our past experiences; our language. But we are prisoners in a Pickwickian sense; if we try we can break out of our frameworks at any time. Admittedly, we shall find ourselves again in a framework, but it will be a better and roomier one; and we can at any moment break out of it again” (Popper, 1970: 86, cited in Lewis & Grimes, 1999: 687).

**EXEMPLAR THEORIES: GOAL-SETTING AND STRATEGY**

We contend that a virtue-theory based Multistream management theory will be qualitatively different than parallel Mainstream management theory based on a variation of consequential utilitarianism. This applies to a broad range of theories, but for the purposes of this paper we will illustrate how a Multistream approach compares to and informs both a micro and a macro theory of management. In particular, we will examine two of the most influential and popularized theories in the literature. The two academic exemplars we focus on in our paper are theories authored by the only two names that appear on the list of the top twenty most-cited scholars both in: 1) the academic literature (Podsakoff et al, 2008) and 2) our review of six top-selling management textbooks. Our micro exemplar, goal-setting theory as developed by Edwin Locke and colleagues (cf. Locke & Latham, 1990), has been rated by organizational behaviorists as the “most important” among 73 different theories (Miner, 2003). On the macro side we chose strategy theory as developed by Michael Porter, who has been called the world’s leading business guru/intellectual (e.g., Dearlove & Crainer, 2005; Stonehouse & Snowdon, 2007).

Of course, it is beyond the scope of this paper to review the extensive literature in goal-setting and strategy (e.g., there have been 400 studies published in goal-setting theory alone). Nor will we critique how whether these theories exhibit all the characteristics of “good theory” (e.g., given that they are so influential, we will assume that if we develop a parallel Multistream version this too makes a valuable theoretical contribution). Rather, for reasons of parsimony our focus will be on the central tenants of each theory noting that: 1) they are supported by robust
research findings which delineate a range of direct effects and moderating conditions, and 2) it is not necessary analytically to review the full scope of each theory in order to demonstrate our point that a different set of underpinning assumptions can generate alternative theories and novel explanations for current research findings. It also is important to note that our intention is not to refute existing theory and research, but instead to offer an alternative perspective of these two influential theories. Our efforts are intended to stimulate new virtue-based management theory, which may also serve to refine and extend existing theory. In any case, as we will describe in our Discussion section, the specific Multistream theories we present are quite exploratory and not yet fully developed, but taken together they provide an enlightening description of how a different substantive rationality gives rise to different formally rational management theory and practice.

To be clear, our argument is not that Locke and Porter, or their theories, are a perfect fit with the Mainstream ideal-type, but rather we will highlight some ways in which their theories can be used to represent a Mainstream ideal-type. Put differently, we highlight how their theories exemplify a materialist-individualist variation of consequential utilitarianism, but at the same time we also explicitly note that these scholars themselves recognize that their theories may have some Multistream aspects. Indeed, we would expect few theories to be purely Mainstream or purely Multistream, but even so we concur with Weber that by using these ideal-types we can gain a deeper understanding of the different theories. That said, we posit that most readers would agree that the conventional goal-setting and strategy theories as described here lie closer to the Mainstream end of the continuum than the Multistream end. Moreover, again to be clear, we are not suggesting that Mainstream theory generally, nor Locke’s goal-setting theory or Porter’s strategy theory, are somehow “bad” or “wrong.” For that matter, we also are not suggesting that they are the best examples of theory per se—we chose them as exemplars for our study because they have been so influential in the scholarly and practitioner literatures.

Mainstream Goal Setting

The practical reason that prompted the development of goal-setting theory was “to explain why some people worked harder than others or performed better than others on a task independently of their ability and knowledge” (Locke & Latham, 1990: 10). Edwin Locke believed, based on his own introspection, that the then-dominant behaviorist approach to understanding motivation offered a dubious and limited view of human action (Locke & Latham, 2005). Goals provided a cognitive explanation for motivation. “A goal is the object or aim of an action, for example to attain a specific standard of proficiency, usually within a specified time limit (Locke & Latham, 2002: 605). Philosophically, goal-setting theory is founded upon Objectivism (see Rand, 1964, 1969), and “especially the premises that people are rational beings who survive by the use of their minds, that they possess volition (the power to think or not to think), and that their actions are regulated by their thinking and the conscious and subconscious
ideas” (Locke & Latham, 1990: xv).

Desirable outcomes. As shown in Table 1, Mainstream goal-setting theory and research focuses primarily on task performance (e.g., optimal efficiency, productivity) that lends itself to being measured in quantifiable terms. Although goal-setting theory focuses primarily on individual task performance, the theory has been applied at multiple levels of the organization (Locke & Latham, 1990).

TABLE 1: Comparing Mainstream and Multistream Goal-Setting Theory

<table>
<thead>
<tr>
<th>Basic components of theory</th>
<th>Mainstream approach</th>
<th>Multistream approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desired Performance</td>
<td>Optimize task performance, productivity, efficiency</td>
<td>Enhance multiple forms of well-being (financial, social, spiritual, physical, ecological, etc)</td>
</tr>
<tr>
<td>Attributes of effective goals</td>
<td>Difficult (yet attainable) Specific/Measurable</td>
<td>“Do your best” or “Be your best” Significant/meaningful</td>
</tr>
<tr>
<td>Mediators (Mechanisms) - distractions</td>
<td>Goals direct behavior/avoid distractions</td>
<td>Expect distractions and integrate them</td>
</tr>
<tr>
<td>- focus behavior</td>
<td>Focusing on achievement goal is energizing</td>
<td>Discerning and learning in community is energizing</td>
</tr>
<tr>
<td>- persistence</td>
<td>Existence of goal contributes to persistence</td>
<td>Meaningfulness of goal (and participative process) contributes to persistence</td>
</tr>
<tr>
<td>- knowledge acquisition</td>
<td>Develop/apply knowledge that will help to perform tasks (especially with individual instrumental value)</td>
<td>Develop/apply knowledge that has task and/or relational value (i.e., may help others as well as self)</td>
</tr>
</tbody>
</table>

Attributes of effective goals. At its core, goal setting theory asserts that performance is
optimized when goals are: 1) challenging-yet-attainable (rather than easy), and 2) specific-and-measurable. From this perspective an ambiguous goal—such as “do your best”—will lead to suboptimal performance because it fails the test of motivating a specific and difficult level of performance (Locke, 1968), and because it allows people to rationalize lower levels of performance as acceptable (Latham & Locke, 2006). The effects of these goal attributes are mediated by: 1) not being distracted by other goal-irrelevant action, 2) focusing effort on the goal, 3) persistence and 4) task knowledge. Put somewhat differently, goals affect task performance because they: 1) “serve a directive function,” 2) “have an energizing function,” 3) “prolong effort,” and 4) lead “to the arousal, discovery, and/or use of task-relevant knowledge and strategies” (Locke & Latham, 2002: 706-707).

**Multistream Goal-Setting**

Consistent with Locke’s own approach and his counsel that management scholars who seek to build new theory should start “with a simple, core idea” (Locke, 2007: 884), our variation of goal-setting theory is based on the core idea that Mainstream goal-setting theory places too much attention on measurable task performance of individuals, and thus overlooks many important goals that are not task-based and do not lend themselves to easy measurement. Practically, the reason to develop Multistream goal-setting theory is to explain why some people have more fulfilling work than others or achieve better performance among multiple forms of well-being than others, independent of their ability and knowledge. Philosophically, rather than being based in objectivism (which has been called “an ethics of ‘rational selfishness’”, Stoker, 1992: 372), Multistream goal-setting theory can be grounded in Aristotelian virtue theory, and especially the idea that the purpose of life is to maximize overall well-being (happiness, *eudaemonia*), and that this can best be achieved by practicing virtues in community (Aristotle, 1999; Dyck & Schroeder, 2005; MacIntyre, 1981).

**Desired Outcomes.** In contrast to a focus on financial performance or task performance (e.g., productivity, efficiency), Multistream goal-setting theory focuses on performance that encompasses multiple forms of well-being for multiple stakeholders. This is the core kernel or insight of the Multistream approach: people prefer and prosper with balance. Not only do they want to be productive and efficient in organizations (the focus of the Mainstream approach), but they also want to have satisfying relationships, enhance their communities, promote social justice and ecological well-being, and leave the world a better place than they found it (e.g., Giacalone, 2004). For example, instead of primarily seeking task-based achievements at work for themselves or the organizations in which they participate, people have relational needs and significance needs that extend beyond task achievement which may, for example, motivate altruistic behavior or actions that promote mutual benefit.
While it may be true that a task-based goal can of itself provide “purpose to an otherwise meaningless task” or add fun even to tasks deliberately designed to be meaningless—such as digging and then refilling holes (Latham, 2003)—a Multistream approach would focus instead on more sustainable motivation that comes from deliberately pursuing intrinsically meaningful ends like contributing to the overall learning and growth of organizational members, providing hope for people facing poverty or discrimination, improving the ecological sustainability of business practices, or enhancing the well-being of members of the community. Because such Multistream goals tend to be more complex and require trade-offs, they are to be avoided from a Mainstream perspective which typically focuses primarily on financial or task performance goals (Locke, 2007: 878). Whereas seeking to balance complex Multistream goals may indeed lower task performance, we posit that it will increase overall wellbeing. In sum, the desired outcomes in a Multistream perspective include but go far beyond individual task performance, and thus are more complex and there is a greater potential for conflict (and synergy) between the different desired outcomes.

Attributes of effective goals. A Multistream approach is premised on the assumption that people have desired outcomes that go beyond task performance. This has implications on the attributes of effective goals and, in particular, whether it is optimal for goals to be difficult and measurable. In terms of difficulty, in so far as Multistream performance outcomes are more complex than the relatively simple/unidimensional/task-focused goals typically examined in Mainstream goal-setting theory, then even results from the goal-setting literature suggest that “do your best” may be better than setting difficult goals: “When people are confronted with a task that is complex for them, urging them to do their best sometimes leads to better strategies” (Locke & Latham, 2002: 707) “than setting a specific difficult performance goal.” Moreover, a decreased emphasis on difficult task goals not only facilitates the achievement of complex goals, it may also mitigate unwanted behavior by reducing incentives to take excessive risks, lie, or engage in unethical behavior in order to achieve the difficult goals (Larrick, Heath, & Wu, in press; Ordóñez et al., 2009; Schweitzer, Ordóñez, & Douma, 2004). By adopting a Multistream perspective that deemphasizes a focus on difficult task-based goals, organizational members can direct attentional resources to other goals, which perhaps better serve stakeholder relationships. Another advantage of the “do your best” approach is that it “allows people to give themselves the benefit of the doubt in evaluating their performance” (Locke & Latham, 1990: 30-31). While this is seen as undesirable from a Mainstream perspective, the reduction in stress is desirable from a holistic Multistream view. Indeed, even when difficult goals are achieved, the stressful process of goal pursuit can have a negative influence on self-evaluations (Mussweiler & Strack, 2000).

Regarding specificity, whereas task performance and financial well-being may lend themselves to ease of measuring (which partly explains their appeal and pervasiveness), Multistream goals like enhanced ecological, social, spiritual and aesthetic well-being often do
not lend themselves to easy measurement. And because many important goals are difficult to measure, they tend to get overlooked: “An axiom in psychology is that which gets measured, gets done. Measurement conveys loudly and clearly what organizational decision makers believe is important, versus what they say is important” (Latham, 2003: 316). In other words, specific goals direct attention and behavior, but they also seem to blind people to other non-specified-goal concerns. Staw and Boettger (1990) demonstrated this in a proofreading task. Participants who were instructed to proofread and correct text that was to be used in a promotional brochure attended primarily to either grammatical or content errors, depending on which specific goal they were assigned, but in general goal conditions participants attended to and corrected both types of errors. Except for very simple tasks, specific goals may limit the use of holistic “counter goal behaviors” that benefit the organization through increased adaptation, innovation, and collaboration (Katz & Kahn, 1966; Staw & Boettger, 1990). For example, goal-setting can contribute to a culture of competition throughout the organization in which a focus on individual or unit performance goals trumps helping other members of the organization (Wright, George, Farnsworth, & McMahan, 1993). Multistream goal-setting theory embraces the ideas that many important goals are not easy, and may even be impossible, to measure. This approach reflects the truth evident in a maxim attributed to Einstein: “Not everything that counts can be counted, and not everything that can be counted counts” (Cunningham & Scott, 2004).

With regard to mediators, both opponents and proponents of Mainstream goal-setting theory as currently conceptualized recognize that in addition to its positive effects, a number of deleterious effects of goal-setting that can arise when goals evoke effort that is narrowly focused, energized toward achievement, persistent, and restricted by a limited knowledge domain (Locke & Latham, 2009; Ordóñez, Schweitzer, Galinsky, & Bazerman, 2009). It is beyond the scope of this paper to present a fully-developed Multistream variation of its four mediators, but we do offer the following: 1) rather than emphasize how the directive function of goals enables people to avoid “distractions” (Mainstream), a Multistream approach recognizes that these “distractions” may occasionally be noble endeavors (e.g., helping out co-workers) and it seeks to integrate or synthesize unexpected or competing interests; 2) rather than being energized by having an achievement goal per se, Multistream energy is drawn from working with and learning from others in the on-going process of mutual goal-setting; 3) rather than engendering prolonged effort to attaining a goal, in a Multistream approach persistence is based on goal meaningfulness and an on-going participative process of evaluation and discernment; and 4) rather than developing task knowledge that is goal-relevant, a Multistream approach develops knowledge that is relevant to, but also goes beyond, (narrowly-defined) tasks.

By way of illustration, aspects of Multistream goal-setting are evident in Semco (Semler, 1989, 2004; Vogl, 2004), which employed about a hundred people when 21 year-old Ricardo Semler took over the company from his father. Consistent with the directives of Mainstream
goal-setting theory, at the time Semco had well-developed and measurable operating standards and detailed job descriptions that indicated the tasks performed by each position.

Ricardo Semler, however, was not fond of the way things were organized at Semco. He had previously worked for a summer in Semco’s purchasing department, and asked himself: “How can I spend the rest of my life doing this? How can I stomach years of babysitting people to make sure they clock in on time? Why is this worth doing?” So, he threw out the books of rules and regulations and embarked on an adventure more consistent with Multistream goal-setting theory. Although Semco has since grown to over 3000 employees and $200 million in annual revenues, its manual has been reduced to 20 pages. Consistent with a Multistream emphasis on having an on-going calibration of the balance between multiple forms of well-being for multiple stakeholders, Semco deliberately allows its goals to evolve based on input from a variety of stakeholders.

“After all, the goal is to exchange [Mainstream] revenue-based evaluations for something much more complex and revealing. By evaluating success from everyone’s point of view, we believe we’ll land on the new list of companies that unite sustainability with all-around satisfaction. Let’s call this list the Fortunate 500” (Semler, 2004: 98).

Rather than focus on difficult and specific goals, Semco has a “Do your best” approach illustrated by its “Lost in Space” program, which assumes that young recruits often do not know what they want to do with their lives. The program allows them to roam through the company for a year, doing what they want to do, moving to a different unit whenever they want to. This approach creates opportunities for everyone to be sensitized to needs and opportunities that might otherwise be overlooked.

In sum, whereas Mainstream goal-setting theory places primary emphasis on increasing productivity and competitiveness (task performance), the key values and goals for managers at Semco are interpersonal trust, democracy and the flow of empowering information. If he can manage Semco towards these overarching goals, then Semler is confident that other sub-goals—like financial profitability, meaningful work, motivated employees, and work-life balance—will follow. Workers in Semco choose their own work hours, set their own salaries, and decide who will be their managers. In short Ricardo Semler reveals in the fact that he is not a Mainstream manager, and he wants to keep it that way. Even though Semco has had an outstanding growth rate, Semler is also very clear that growth and profits are not his primary goals. He says, “I can honestly say that our growth, profit, and the number of people we employ are secondary concerns. Outsiders clamor to know these things because they want to quantify our business. These are the yardsticks they turn to first. That’s one reason we’re still privately held. I don’t want Semco to be burdened with the ninety-day mind-set of most stock market analysts. It would undermine our solidity and force us to dance to the tune
we don’t really want to hear—a Wall Street waltz that starts each day with an opening bell and ends with the thump of the closing gavel‖ (Semler, 2004: 12; emphasis added).

Semler’s approach has attracted admiration among his peers, since a poll of 52,000 Brazilian executives has chosen him to be business leader of the year on several occasions.

**Mainstream Strategy**

Michael Porter’s most influential contribution to the literature has been his frameworks about generic strategies and the five competitive forces (Stonehouse & Snowdon, 2007: 257), which he has linked together with ideas about value chains, drivers and other antecedent factors towards developing a theory of strategy (Porter, 1991; Porter 1998, 1985). Practically, the primary purpose of his theory is to understand how firms can achieve “superior profitability,” which he agrees is both “the right goal, and for firms, the only goal” in developing strategy (interview in Stonehouse & Snowdon, 2007: 267). Philosophically, Porter’s strategy theory for achieving sustained competitive in the economic marketplace was drawn from I/O economics, and its assumptions about maximizing financial well-being, self-interest, and competitiveness.

**Success of an organization.** For Porter, perhaps “the central question in strategy” is to understand “why firms succeed or fail” (Porter, 1991: 95). For him success is evident when a firm attains “a competitive position” that leads to “superior and sustainable financial performance” (Porter, 1991: 96; cf. Stonehouse & Snowdon, 2007: 268). His theory seeks to offer “credible guidance for individual companies” to achieve this financial success (Porter, 1991: 97). The best-known parts of his theory posit that a firm’s success is a function of 1) a firm’s relative position in its industry (i.e., its generic strategy), and 2) the attractiveness of five competitive forces within its industry.

**Relative position of the organization within its industry.** According to Porter’s theory, firms can choose between two generic strategies in order to achieve “competitive advantage” and “superior profitability”: 1) cost leader strategy (having a lower cost than rivals) or 2) differentiation strategy (being able to command a premium price that exceeds the extra cost of providing goods/service with unique features). These two strategies are examined alongside the idea of competitive scope, which encompasses “the array of products and buyer segments served, the geographic locations in which the firm competes, its degree of vertical integration, and the extent of related businesses in which the firm has a coordinated strategy” (Porter, 1991: 101).

**Structure of the industry.** “Some firm successes come almost wholly from the industry in which they compete; most of their rivals are successful too!” (Porter, 1991: 100). Porter has developed a five forces framework for understanding industry structure. In a nutshell, success is
more likely in industries with low: 1) supplier power (i.e., there are numerous suppliers); 2) buyer power (there are numerous customers); 3) threat of substitutes (there are few substitutes, or the use of substitutes requires extra resources); 4) threat of entrants (e.g., there are high capital requirements to start a new firm in the industry); and 5) intensity rivalry (e.g., there is a lot of differentiation among firms in the industry, so that firms face little direction competition).

Multistream Strategy

Practically, the primary purpose of Multistream strategy theory is to understand how organizations can achieve an optimal balance between multiple forms of well-being for multiple stakeholders, which from this perspective is the right goal for developing strategy. For example, the Multistream approach seeks to develop strategy theory that can help organizations address some of the pressing problems of the day, including strategies that can enhance ecological sustainability, social justice and community-mindedness. Philosophically, Multistream strategy builds on: 1) a holistic Aristotelian view of economics (oikonomia) and, 2) a view where nurturing mutually beneficial interdependence in community is valued more highly than maximizing competitiveness.

First, a Multistream approach challenges the idea that economics is primarily about optimizing financial well-being. While it may be true that this is what economics has become in contemporary thinking, this is a clear departure from its ancient meaning. The word economics comes from the Greek word oikonomia (literally, “household management”). Whereas today the term household refers to a consumptive entity (e.g., members of a household go to work outside of their household in order to purchase the goods and services required to run a household), for thousands of years “households” were the primary productive unit in society. A household could consist of hundreds of people and numerous biologically-unrelated families, and prototypically consisted of a husband and wife, their children (and sometimes their children’s spouses and other relatives), and their slaves and servants (and their families). Aristotle’s analysis of household management (oikonomia) is considered to be among the most profound among ancient writers (Nagle, 2006; see also Stahel, 2006; Wilson, 2005), and is consistent with a Multistream view that emphasizes multiple forms of well-being for multiple stakeholders in the long-term.

In particular, although Aristotle recognized the importance of managing the financial aspects of a household (chrematistics), he was emphatic that this financial wealth-maximizing approach should remain subservient to oikonomia. For Aristotle chrematistics should be a subset of oikonomia (as depicted in Figure 1). He feared that the pursuit of chrematistic wealth-maximization might become more important than oikonomia, and that managers would focus on wealth-maximization and thereby ignore and cause deterioration among other forms of well-being (e.g., he feared that absentee landowners would learn that greater profits could be earned...
by planting cash crops rather than treating tenant subsistence farmers with dignity). For him such *chrematistic* managers “are intent upon living only [“an easy life”], and not upon living well [“a good life”]” (Aristotle, *Politics*, Book 1, Part 9). In short, Aristotle reminds us that economics is grounded in moral philosophy, and there are fundamental differences between a Mainstream (*chrematistic*) and a Multistream approach (*okionomia*).

A second assumption characterizing Mainstream strategy theory—and economic theory generally—is that *competition* among firms is a given, is inherently good for society, motivates people and organizations to do their best, encourages organizations to continuously improve, promotes efficiency, reduces opportunities to gouge the consumer, and is a natural part of the human condition. However, even proponents of competitiveness would agree that a “win at all costs” mentality can bring out the worst in people (O’Boyle, 1998), and some research suggests that competitive pressures may lead to unethical behavior and corruption (e.g., Kulik, O’Fallon & Salimath, 2008; Shleifer, 2004).

A Multistream approach suggests that, even at its best, competitiveness simply does not warrant its central role in management theory. Why do we assume that the desire to compete brings out the best in humankind? Would not the desire to share, or to eradicate poverty, or to live sustainably on the planet, or to ensure that everyone is treated with dignity, be much more likely to truly bring out the best in us? What if our organizational strategies, structures and systems were designed towards these ends, instead of designed simply to out-compete rivals?

The success of an organization. From a Multistream perspective, the central question in strategy is to understand why firms succeed or fail at achieving sustainable overall well-being. *Chrematistically*-minded actions like downsizing and sub-prime loans may maximize financial success in the short-term, but they can result in long-term financial and social problems (*okionomia*). This draws attention to how success is defined, and takes one step further Porter’s observation that “a lot of strategy mistakes are a function of the *goals* that are set” (Porter, interviewed in Stonehouse & Snowdon, 2007: 267; emphasis added here). Whereas Porter’s remark refers to goals within an overarching theory that defines organizational success in terms of superior profitability, his statement is also consistent with our argument that we need to develop Multistream strategy theory, where the goals or criteria used to define organizational success include improving and balancing multiple forms of well-being for multiple stakeholders. Note the overlap with how our earlier discussion of Multistream goal-setting here applies to strategic goals. For example, Mainstream strategic goals like superior profits are difficult and measurable, while Multistream *oikonomia* goals like nurturing community, ecological stewardship, and social justice challenge people to “Do their best (in ways that go beyond merely *chrematistic* performance)” and may not lend themselves to easy measurement.
FIGURE 1: Aristotle’s view of *Oikonomia* versus *Chrematistics*

*Oikonomia* - Multistream

On-going concern for multiple forms of well-being (e.g., financial, physical, social, political, spiritual, aesthetic, etc) for multiple stakeholders (e.g., owners, workers, neighbors, families, society)

*Chrematistics* - Mainstream

Concern for maximizing financial well-being

Adapted from Stahel, 2007

Because a Multistream approach offers a different way for people to think about what constitutes organizational success, this in turn will lead to a different way to think about generic strategies and larger environment. Consistent with the self-fulfilling prophecies, enabling *people to think differently* about strategy can in turn influence management *practice*.

“I firmly believe that my fundamental role is to create ideas and to *change the way that*
people think. My fundamental goal is to change the framework, to change the perspective of the way that people look at a problem. Most things in life are driven by ideas. In my case, I am not writing and addressing my work primarily to the academic community and literature. I see my main role as changing practice, whether it be the practice of government officials setting economic policy or business leaders setting company strategy” (Porter, in Stonehouse & Snowdon, 2007: 270; emphasis added here),

The Organization’s Relative Position within its Industry. Parallel to but qualitatively different from Porter’s two generic strategies, there are two basic types of Multistream strategies that can be identified: 1) minimizer strategy and 2) transformer strategy. A minimizer strategy seeks to provide desired goods and services in a way that limits overall costs (e.g., financial, social, ecological). In one sense, the minimizer strategy can be seen as an oikonomia variation of a chrematistic cost leader strategy. Consistent with chrematistic economics, a cost leader strategy focuses on minimizing a firm’s internal financial costs (to benefit owners). Consistent with oikonomia economics, a minimizer strategy focuses on reducing multiple kinds of costs for multiple stakeholders.

Minimizing the financial cost (Mainstream) an organization pays for its inputs can be very different from minimizing overall cost (Multistream). For example, CEO Ray Anderson of Interface Inc.—a U.S. company with over $1 billion in annual sales and the largest supplier of modular carpeting in the world—notes that Interface pays the market price for oil, but it does not pay for clean-up or health costs due to toxic emissions or global warming. As part of its minimizer strategy to redesign commerce so that it reduces the overall costs of natural resources (not merely financial costs), Interface seeks to use environmentally-friendly transportation and to use only renewable energy (e.g., use solar power rather than oil). Put differently, even if the price of oil is lower than alternative energy sources, a minimizer strategy may opt for a higher-priced alternative energy sources because it considers the overall costs of oil (Anderson, 1998).

Minimizers consider not only the financial costs to produce their goods and services, but also seek to minimize social costs (e.g., they try to provide a positive work environment in order to minimize workplace conflict/stress), physical costs (safe work to reduce injuries), ecological costs (e.g., minimize ecological footprint), and so on. For example, from a Mainstream perspective managers may want to lower financial costs by reducing employees’ pay or insurance benefits, but this may entail higher overall social costs (e.g., such as the stress caused for families who are unable to have their medical needs met, in addition to medical expenses that may cost more than insurance). Consistent with a Multistream view, Costco continues to pay its workers relatively high wages (compared to Wal-Mart) even though Wall Street analysts complain that: “At Costco, it’s better to be an employee or a customer than a shareholder.” “Paying your employees well,” says Costco CEO James D. Sinegal, “is the right thing to do”
(Holmes & Zellner, 2004: 77). Moreover, he adds that paying rock-bottom wages may decrease employee’s happiness which in turn may 1) increase turnover, 2) lower customer satisfaction and 3) stifle creativity and innovation in the workplace. Sinegal is also concerned because retail workers are increasingly unable to afford the merchandise sold in their own stores, which he feels is not a sustainable situation in the long-term (Cascio, 2006).

A transformer strategy seeks to provide desired goods and services in a way that redeems what were previously discarded or under-appreciated resources (e.g., pollution). For example, a transformer strategy is evident in organizations that recycle tires to make floor mats, garden hoses, office supplies, and road surfacing. It is also evident in volunteer agencies that encourage seniors to participate in after-school programs that help children with reading difficulties.

Some firms successfully simultaneously pursue both a minimizer and a transformer strategy. This is evident when organizations like Staples promote the use of recycled paper as well as accept computers and monitors for recycling, instead of sending them overseas where they become environmental problems (Jewell, 2007). Both strategies are also evident at Interface where, in addition to minimizing its ecological footprint by lowering both the amount of resources it requires and the waste it produces, it also seeks to transform existing waste. Perhaps this is most evident in its product design (environmentally friendly, recyclable) and how it sells it. Interface was a pioneer by developing its “Evergreen Lease” where, instead of buying carpets, customers perpetually lease the service of carpeting (and Interface cleans and replaces carpet tiles as necessary). Instead of customers discarding used carpet in landfills, it is returned to Interface where it is recycled. This “cradle-to-cradle” thinking at the organizational level helps companies like Interface reduce their inputs by reclaiming what previously was waste. Similar thinking is evident in “zero emissions industrial parks,” where the “waste” output from one firm becomes transformed into valuable input for its neighbor (e.g., Gibbs & Deutz, 2007; Tudor, Adam & Bates, 2006), which brings us to the next section.

Industry structure. Paralleling Porter’s five competitive forces, Multistream strategy theory draws attention to five factors that can be used improve overall well-being among a community of organizations (see brief description in Table 2). In general terms, these five Multistream factors can serve to minimize or transform wasted resources (e.g., pollution, underemployment) and enhance well-being among various stakeholders (e.g., nurture community, understanding, sustainable relationships).

**TABLE 2: Comparing Mainstream and Multistream Strategy Theory**

<table>
<thead>
<tr>
<th>Basic Components of Theory</th>
<th>Mainstream approach</th>
<th>Multistream approach</th>
</tr>
</thead>
</table>

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The Success of an Organization

The “essential goal” of firms is to optimize their profitability. The essential goal of firms is to optimize overall well-being.

The Structure of the Industry (five key factors)

<table>
<thead>
<tr>
<th>Industries that foster success are characterized by low:</th>
<th>Industries that foster success are characterized by supporting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) supplier power</td>
<td>1) supplying previously-underutilized resources</td>
</tr>
<tr>
<td>2) buyer power</td>
<td>2) purchasing previously-underutilized resources</td>
</tr>
<tr>
<td>3) threat of substitutes</td>
<td>3) welcoming substitutes that enhance overall well-being</td>
</tr>
<tr>
<td>4) threat of entrants</td>
<td>4) bridge-building among organizations</td>
</tr>
<tr>
<td>5) intensity rivalry</td>
<td>5) mutually beneficial interdependencies</td>
</tr>
</tbody>
</table>

The Organization’s Relative Position within its Industry (generic strategies)

<table>
<thead>
<tr>
<th>Achieve competitive advantage and superior profitability via:</th>
<th>Improve overall well-being (e.g., achieve sustainable mutual advantage) via:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) cost leader strategy</td>
<td>1) minimizer strategy</td>
</tr>
<tr>
<td>2) differentiation strategy</td>
<td>2) transformer strategy</td>
</tr>
<tr>
<td>3) appropriate scope</td>
<td>3) appropriate domain</td>
</tr>
</tbody>
</table>

A helpful ecological example of the five Multistream factors in practice can be found in a community of organizations in Kalundborg, Denmark, where firms take the “waste” produced by one organization and turn it into valuable inputs for another (see Figure 2). It all started when the coal-fired Aesnes Power Plant stopped pouring its “waste” heat as condensed water into a nearby fjord. Instead, Aesnes began to sell the heat directly to the Statoil refinery and to the Novo Nordisk pharmaceutical firm. Shortly thereafter, the Statoil refinery installed a process to remove sulfur from its “waste” gas. It then sold the extracted sulfur to the Kemira chemical company, and the cleaner-burning gas to the Gyproc sheetrock factory and to Aesnes (thereby saving
30,000 tons of coal). When Aesnes began to remove the sulfur from its smokestacks it produced calcium sulfate, which it sold to Gyproc who used it in place of mined gypsum. “Waste” fly ash from Aesnes coal generation is also used for road construction and concrete production. In time Aesnes began to provide surplus heat to residents of the town (who were then able to shut off 3,500 oil-burning heating systems), to greenhouses, and to a fish farm. Soon “waste” heat from Statoil went to the fish farm, which produces about 200 tons of turbot and trout sold in the French also market. Sludge from the fish farm is used as fertilizer by farmers, who also receive sludge from the Novo Nordisk company. All these relationships happened spontaneously without direct government regulation. Initially relationships were often motivated primarily by chrematistic economics, but over time initiatives have been made for largely ecological or oikonomia reasons, and these have also yielded financial benefits (Hawken, 1993: 62-63; cf. Tudor, Adam & Bates, 2006; Gibbs & Deutz, 2007).

This example nicely illustrates differences between a Mainstream and a Multistream approach to understanding the five key elements of an industry structure, and also demonstrates that the relevant external relationships in Multistream approach may extend to a community of organizations beyond the focal firm’s specific industry:

1) rather than minimizing dependence on suppliers (Mainstream), a Multistream approach outputs (“waste”) into materials for inputs (e.g., nearby greenhouses were happy to depend on “waste” heat supplied by the Aesnes Power Plant);

2) rather than minimizing the power that buyers have over a firm (Mainstream), a Multistream approach welcomes becoming dependent on specific buyers to nurture community or trans-form waste (e.g., Nova Nordisk’s primary motive to transform the waste “sludge” was not to increase their power over the farmers who were the buyers of the sludge, but rather to help meet farmers’ need for fertilizer and simultaneously foster environmental sustainability);

3) rather than minimizing competition from substitutes (Mainstream), a Multistream approach embraces substitutes that enhance overall community well-being (e.g., Statoil welcomed the “substitute” heat that Aesnes provided for what had been 3,500 oil-burning customers; similarly community well-being was further enhanced when Statoil’s waste gas served as a “substitute” for burning 30,000 tons of coal at Aesnes);

4) rather than erecting entry barriers (Mainstream), a Multistream approach is more concerned with removing barriers that prevent firms from cooperating with each other (e.g., barriers to
FIGURE 2: Transfer of Previous “Waste” within a Community of Organizations

1. Reclaim waste (no concern about high supplier power)
2. Provide sludge (no concern about buyer power)
3. Aesnes provides a substitute for Statoil in heating Kolundburg, and Statoil’s waste gas is a substitute for 30,000 tons of coal at Aesnes (no concern for threat of substitutes)
4. Anti-pollution technology overcame “barriers to cooperation” and allowed Statoil to provide previously wasted resources to Gyproc and Kemira (no concern about barriers to entry)
5. Both Aesnes and Statoil provide heat to fish farms (without concern for rivalry intensity)
cooperation were removed when technology permitted Statoil’s “waste” sulfur gas to yield both new sources of sulfur for Kemira as well as cleaner-burning gas for Gyproc);

5) rather than decreasing rivalry intensity (Mainstream), a Multistream approach is concerned with increasing mutually beneficial interdependence across organizations (e.g., Statoil and Aesnes cooperated to use their “waste” heat for a fish farm, which in turn willingly provides fertilizer for farmers).

In sum, whereas a Mainstream analysis of the external environment emphasizes external relationships that enable a firm to achieve sustainable competitive advantage, the Multistream analysis focuses on achieving sustainable mutually advantageous relationships. The five forces are similar, but the agenda toward which they are used is quite different. Note that, whereas the Kalundborg example emphasizes ecological well-being, the same five forces can be used to think about other goals, such as achieving sustainable social justice. For example, to improve social justice, managers might cooperatively minimize oppressive working conditions for poorly-paid workers. When organizations like Starbucks and Pura Vida promote “fair trade” coffee they help coffee growers earn a living wage. Ten Thousand Villages is an example of a Multistream organization that links with craftspeople in low-income countries and imports their products at a price that ensures that the craftspeople earn an adequate livelihood.

CONCLUSION

The goal of this paper was relatively straightforward, namely to develop a virtue-theory based Multistream approach to goal-setting and strategy theory that parallels its influential Mainstream cousins. By doing so our paper responds to two calls in the literature. The first argues that there is a need to develop alternative management theory that is not based on a materialist-individualist variation of consequential utilitarianism (e.g., Ferraro et al, 2005; Ghoshal, 2005; Giacalone & Thompson, 2006; Mintzberg et al., 2002; Weber, 1958). The second points to the merit in developing management theory via paralleling differing approaches or paradigms (Calas & Smircich, 1999; Lewis & Grimes, 1999; Poole & Van de Ven 1989).

In this final part of the paper we will highlight three implications of our paper for developing virtue theory based management theory, for dealing with self-fulfilling prophecies, and for developing a deeper understanding of management.
Virtue theory and the development of management theory

Our study makes a welcome contribution precisely because it draws attention to how management theory is informed by ethics and moral theories (e.g., Bacharach, 1989; Calas & Smircich, 1999). Moreover, our study demonstrate how, beyond using virtue theory to critique management theory, it is also possible to use it to develop new management theory. This is of special interest because virtue theory has been notably difficult to operationalize in terms of management theory (e.g., Dyck & Kleysen, 2001).

The basic method for developing theory used in our study extends the work of Dyck and Schroeder (2005), who developed a virtue theory approach to management over against a materialist-individualist approach to management consistent with a utilitarian moral philosophy management. In particular, they focused their attention on elements of organizing found in management theory. Whereas a conventional (i.e., Mainstream) approach is characterized by its emphasis on specialization, centralization, formalization and standardization, a virtue-theory based approach to organizing is characterized by its emphasis on sensitization, dignification, participation and experimentation. The method adopted in our paper uses a similar conceptual framework, but applies it to Mainstream theories of goal-setting and strategy to develop parallel Multistream management theory and practices.

We believe that the method we describe here can be applied to a range of different management theories (e.g., motivation theory, organization learning, leadership theory, communication theory) and across a range of different management philosophies (e.g., moral rights approach, distributive justice). The idea is to use the moral philosophy as a starting point for theory development, and then apply it to the theoretical domain of choice. Indeed, some of this sort of thinking is already evident in Dyck and Neubert (2010), who develop and present Multistream and Mainstream approach across all the various topics covered in a typical management textbook. Of course, future researchers will also want to empirically test the new theories being developed in this way. For one example of how this might be done, see the work of Dyck and Weber (2006) who empirically tested and found support for the propositions about organizing developed by Dyck and Schroeder (2005).

On self-fulfilling prophecies

Scholars like Edwin Locke and Michael Porter are certainly aware of the self-fulfilling prophecies inherent in their work (e.g., that when people focus on measurable goals then other kinds of goals will tend to get overlooked, and that the content of conceptual frameworks
influences people’s thoughts and actions). By our developing Multistream goal-setting and strategy theory, and contrasting it with its Mainstream counterpart, we draw attention to how (often-unstated) ethical and moral philosophies underpin and influence management theory and, subsequently, behavior.

“When theories produce self-fulfilling beliefs, societies, organizations, and leaders can become trapped in unproductive or harmful cycles of behavior that are almost impossible to change. Inconsistent evidence is unlikely to emerge because people don’t try, or even contemplate, acting in any manner that clashes with accepted truths” (Ferraro et al, 2005: 21).

In this regard, our study raises many questions for future research. For example, is mere awareness of alternative management theory ―that clash es with accepted truths‖ enough to overcome existing self-fulfilling institutionalized norms? How practicable is a Multistream approach in a world dominated by Mainstream thinking? Can organizational members be trusted to achieve adequate task performance if they are also charged with doing their best to balance multiple forms of well-being for multiple stakeholders? Can an oikonomia Multistream strategy be viable alongside chrematistic Mainstream rivals? Does the materialist-individualist institutionalized order have such an “irresistible force” that it will dominate management theories (Weber, 1958: 181)? Is a Multistream approach nice in theory, but of little use in the real world?

These are important questions, and we do not pretend to have all the answers, but we do offer the following observations. To begin, we note that Multistream practices may already be much more evident that Mainstream theory and research would suggest (Dyck & Schroeder, 2005; Dyck & Neubert, 2010). This is evident not only in firms like Semco and Interface, but also communities of organizations such as Kolundborg or in the New York fashion industry prior to it being taken over by large corporation (Uzzi, 1997). It is also evident in observations that practicing managers consider it to be unethical to focus solely on shareholder’s interests (Donaldson & Preston, 1995) and that they regularly make strategic choices that value other goals more highly than the goal of maximizing financial performance (Child, 1972).

Moreover, emerging research suggests not only is Multistream management viable, but it may offer important advantages over a Mainstream approach. For example, lab experiments show that “consistent contributors” who act in the interests of the larger group (i.e., and who thereby go against what is formally rational from a Mainstream perspective) not only help out their group members in the short-term, but they contribute to their teams performing better in the long-term compared to Mainstream groups (e.g., Weber, 2004). Similarly, research within the servant leadership literature suggests that compared to a more narrow task-based management approach, being sensitive to the needs of the larger community and employee growth contributes to increased creativity and collaboration (e.g., Neubert, Kacmar, Carlson, Chonko, & Roberts,
2008). These are precisely the sorts of benefits that “are the most difficult measure” and “will be most essential” for management theory in an increasingly complex and inter-related world (Hamel, 2007: 99). Altogether, there is increasing sentiment that self-fulfilling prophecies built into status quo theorizing may not be adequate for addressing the issues of today and tomorrow.

Furthermore, there may be particular need for management theories where issues like ecological well-being and social well-being are not seen as subservient to financial well-being. For example, a recent review of the 31,000 articles written in the top thirty management and business journals over the past 25 years found only 9 (i.e., 0.029 percent!) mention the words “climate change” or “global warming” in their title, abstract or keywords (Goodall, 2008). This suggests that management scholars “do not have the theoretical models available” to place ecological well-being front-and centre in their research: “The social sciences are organized around their distinctive theories. Conceptual structures often lead intellectual inquiry, and the empirical facts are, to some extent, fitted around theoretical frameworks. Environmental changes may be viewed as nontheoretical” (Goodall, 2008: 415). Furthermore, Margolis and Walsh (2003) review the growing literature in Corporate Social Responsibility (CSR), and lament that much of it tries to argue that CSR will help to improve a firm’s profits, when what the world really needs is theory that points to the “best practices” of how to act in a socially-responsible manner (even if these practices do not directly maximize a firm’s financial position). Porter also seems to allude to this in recognizing that “strategic” CSR actions sometimes only have indirect or possibly no effect on the firm’s performance (Porter & Kramer, 2006).

On developing a deeper understanding of management theory

As depicted in Tables 1 and 2, it is clear that the Multistream theory we have described here is very different than its Mainstream counterpart. For example, whereas Mainstream goal-setting theory suggests that effective goals are difficult and measurable, Multistream theory emphasizes “Do your best” and inherently meaningful goals. Whereas Mainstream strategy emphasizes reducing financial costs and achieving competitive advantage over other firms in the industry, a Multistream approach emphasizes minimizing overall costs and achieving mutually advantageous interdependencies.

That said, we are quick to acknowledge that our variation of goal-setting and strategy theory are far from fully developed (though we believe they have the characteristics that lend themselves to further development). In any case, we wrote this paper with both a micro and macro exemplar in order to illustrate how a virtue-theory based Multistream approach could be used to develop new theory in variety of areas. Essentially we are pointing to a parallel universe of theories, where Multistream theories contrast with Mainstream theories, or perhaps expand Mainstream theories by suggesting important contingencies or caveats. Either way, our approach
is consistent with those who argue that paradox and competing assumptions are an excellent way to develop new theory (e.g., Elsbach et al, 1999; Lewis & Grimes, 1999; Poole & Van de Ven, 1989) and to develop a more holistic understanding of management.

Because of its bold normative premise, our paper may be both threatening and freeing for readers. It is threatening because it reminds readers that management theorizing is value-laden. Of course, this is not new, but using the Weberian ideal-type approach of contrasting and comparing the Mainstream and Multistream variation of perhaps the two most influential management theories may draw attention to the substantive rationality underpinning our theories in a way that an abstract philosophical discourse cannot do. Some readers may find this ideal-type framework somewhat jarring and disturbing. It compels us all to consider what the oft-unspoken values that underpin our own management theorizing and practice.

That said we hope that readers will find our paper freeing. In particular, we hope that the conceptual framework and ideal-types we present both compels and facilitates readers to consider more deeply their own moral-point-of-view, and how it relates to their work. As Socrates put it: “An unexamined life is not worth living”. We expect that few readers will identify fully with either of the two ideal-types we present, that some readers may place themselves somewhere along a continuum between the two ideal-types, and that many readers may want to develop their own ideal-type that is different from the two presented here. We see this as healthy because it engages the moral dimension of theory-building, and because it does so in a way that reduces the self-fulfilling prophecies that occur when we fail to acknowledge the underlying moral dimension of management.

FOOTNOTES

1. Mainstream goal-setting theory acknowledges the benefit of these sorts of goals, for example, when learning goals “outperform” performance goals in complex tasks (Locke & Latham, 1990).

2. “Profit beyond the minimum is not essential for survival. In any event, an organization doesn’t really need profit beyond what is vital for working capital and the small growth that is essential for keeping up with the customers and competition. Excess profit only creates another imbalance” (Semler, 2004: 92; emphasis added here).

REFERENCES


EMERGING TECHNOLOGIES IN HEALTHCARE: THE BEST OF TIMES, THE WORST OF TIMES

Sue Conger
Elizabeth McGrady
Sandra L. Blanke
Brett J.L. Landry
University of Dallas, USA

ABSTRACT
Healthcare organizations have new, maturing technologies that appear capable of decreasing costs but are under continuous pressure to stay current in technologies while being frugal with funding. Several new technologies that are beginning to be implemented in healthcare environments appear able to save millions of dollars but all have disruptive potential as well. This paper defines three such technologies: Radio frequency identification, global positioning systems, and nanotechnologies and the managerial issues that relate to them. With cautious attention to managerial issues and meticulous attention to implementation details, healthcare organizations that can successfully navigate the coming technologically-driven paradigm shifts will emerge much stronger organizations.

INTRODUCTION
This is the best of times for healthcare organization in that the choices of cost-reducing technologies abound and, increasingly, healthcare professionals understand that blind cost cutting is not good management practice. This is the worst of times for healthcare organizations in that they are under increasing pressure to improve timeliness of service, provide cheaper service, and improve quality of service delivery, all at lower costs. One initiative to improve healthcare delivery is the ongoing conversion from analog to digital platforms for equipment and the concomitant conversion to shared electronic healthcare record applications. Further, many additional information technologies are in the introductory phase or are on the near-future horizon for healthcare adoption. Yet, healthcare executives are unsure how most technologies might be used in their facilities or what the risks are. Further, few healthcare executives really understand non-medical technologies. This prescriptive research seeks to redress these shortcomings by defining three emerging technologies that promise to radically alter healthcare practice, identifying risks and issues for healthcare decision makers and by describing the technologies’ current states of maturity and healthcare deployment.

The three emerging technologies are Radio Frequency Identification (RFID), Global Positioning Systems (GPS), and nanotechnologies. These technologies were chosen as representative of the spectrum of disruption and payback possible in the healthcare industry. RFID enjoys the most prevalent installed base in healthcare at the moment, being used to identify
everything from equipment to patients. GPS has even more potential to supplant RFID as it uniquely identifies its attached objects. Nanotechnologies will forever alter the economics of doing business in ways that we are only coming to understand. In healthcare, nanotechnologies have the potential not only to improve medical delivery mechanisms but also to alter infrastructure management for healthcare facilities. Each technology is described below, along with a discussion of current applications and technology maturity. These are followed by managerial issues for evaluating adoption of each technology.

**RFID**

Of the three emerging technologies, Radio Frequency Identification (RFID) is the most widely adopted. While RFID has been in existence for more than 50 years, it has been a technology looking for applications with a cost benefit model that supports the technology investment. With the rising costs of healthcare, the economic recession and healthcare budget reductions, healthcare management might reconsider RFID healthcare applications designed for improving both patient care and operational efficiencies.

RFID is a form of automatic identification and data capture (AIDC) technology that uses electric or magnetic fields at radio frequencies to transmit information (Karygiannis, et al. 2007). RFID chips ranges from passive to active. RFID technology includes three elements: a tag, a reader and an information system (Grimaila, 2007). Passive RFID does not transmit until a reader 'requests' data from a tag, has no imbedded energy source, and is limited to reading from about 10 feet (3 meters). The reader is a powered radio frequency transceiver that, in a separate device gives power to passive RFID in the form of radio waves. In contrast, active RFID transceivers contain a battery, memory, and ability to continuously monitor and record sensor inputs. Active RFID transmit continuously and are readable by any reader within 30 meters, or about 90 feet. The tags are re-programmable and vulnerable to worms and software attacks [Miller, 2006; Ricker, 2006]. Active RFID transceivers can be as small as 2x3 inches, are installed in thousands of door portals, and can read data from thousands of tags a minute, from 300+ feet (100 meters), moving at 100 mph [Anonymous 8, 2002]. Active RFID are amenable to hostile environments such as ship cargo holds, deserts, freezers, or warehouses. Prices of RFID chips have steadily dropped for the past ten years and, with the development of RFID printers, the price is now under $.03 for a passive chip. The antennae on printed chips use conductive ink and are virtually invisible (Anonymous 6, 2007; IdTechEx, 2007).

**Current Applications and Maturity**

Healthcare RFID adoption is in an early stage. Three major potential areas for healthcare application include tracking, for instance of equipment, equipment maintenance schedules, drugs, implants, patient flow, bed and room availability; identification, for instance of patient, doctor, vendor and staff; and monitoring for instance of temperature in individuals, refrigerators...
and freezers. While there are many other healthcare RFID applications in use and in design, these three categories provide a basis for understanding the future uses of RFID in healthcare.

Asset tracking in any industry is important to maximize asset use and revenue. Healthcare has the same operational tracking efficiency concerns as other industries however, the importance of asset tracking is significantly magnified when location knowledge may save a life. Some of the items to be considered for tracking might be those most frequently used, items for which having an accurate count is critical, or items for which the current method of tracking of the item is labor intensive or inaccurate. Healthcare items to be tracked by RFID might include items that are limited in number and/or expensive to purchase, such as implants, medications, and portable medical equipment.

RFID for identification has been used for patients, visitors, doctors, vendors and staff. RFID tags may be within hospital-issued identity tags, smart cards, or wristbands. RFID support systems can be programmed to prevent restricted area access or, for instance, prevent a patient from leaving a particular floor. RFID identification successfully matches newborns and their mothers to eliminate the problem of wrong child-parent matches. When admitted, the mother is provided with an RFID wristband and once born, the baby is tracked via an RFID ankle band. Mother and baby are then matched for every visit, ensuring correct identification of mother-baby sets.

The other main category of RFID use is temperature monitoring and logging. Temperature within refrigerators and freezers is critical for the successful storage of blood, organs, drugs, vaccines, tissue samples and food. Recording and monitoring of these temperatures is required by regulatory bodies. With an RFID tag placed inside the refrigerators or freezers the temperature of individual items can be monitored and any temperature outside the acceptable range will cause an alert.

Another temperature monitoring RFID application is for individuals who are in excessive heat or cold situations. Athletes ingest and RFID 'pill' for monitoring their temperature during extensive exercise to help prevent heat exhaustion, heat stroke, and nausea. Sports trainers use a hand held device monitor the athletes’ core temperatures. If someone's core temperature reaches 103°F they are stopped for rest and fluids (Griffin, 2009).

RFID glucose sensors are an application under testing (Upson, 2007). The goal of the project is to create an alternative way for diabetes patients to monitor blood sugar without the need to draw blood. This is an example of new, internal uses for RFID that will continue to mature.

Thus, RFID is a mature technology in the monitoring of objects (human or inanimate); it is an emerging technology for internal uses.

**Key Issues for Decision Makers**

RFID has proven to be cost effective for specific healthcare applications. St. Elizabeth Medical Center in Utica New York uses RFID to automate inventory information, allowing
hospital staff to accurately manage supply levels, easily monitor expired products, and efficiently track product usage. Halsey Bagg, Director of Cardiac Services at St. Elizabeth Medical Center stated, “We did our first year-end of inventory … the actual inventory for the cath[eter] lab went down $700,000… showing how the system actually reduces inventory” (Wavemark, 2007)

One difficult decision for healthcare providers is the type of RFID and which applications will provide the most payback. RFID vendors can help with determining applications and timing and have ROI models or value calculators that may be reviewed to determine if RFID provides cost savings, greater efficiencies, and or improved patient care.

Further, for certain applications RFID may not be the most beneficial technology. For instance, environments with high amounts of liquid or metal have proven to be problematic for accurate RFID readings. A complimentary technology to RFID, RuBee, which is based on magnetic transmissions rather than radio, may be a better choice for such situations (O’Conner, 2006).

Like all networks, RFID architecture must be designed to protect the integrity and confidentiality of tag-reader communications. Wireless communications media, such as RFID, suffer from sniffing attacks-- external devices that intercept and decode the radio communication. Precautions to prevent sniffing and other types of electronic attacks are required (Grimaila, 2007).

RFID requires its own infrastructure, security, and management for quality use. Any organization that cannot track its millions of items now, may not have any easier time with RFID which also need tracking. That is, shrinkage may not decrease; but the estimate of items actually on the premises may be more accurate.

**GPS**

The next new technology applied in healthcare organizations, Global Positioning System technology (GPS), is available in single devices or embedded in devices such as cell phones and cars. Ivan Getting envisioned GPS in the 1950s as a guided missile systems researcher at Raytheon Corporation. Getting left Raytheon, started his own company, and realized his dream for GPS in the 1960s (Anonymous 9, 2007). GPS adoption has been slow but, once its cost became negligible, GPS technology enjoyed wide adoption in cell phones and other portable devices.

GPS is enabled by a constellation of 27 earth-orbiting satellites, 24 of which are in active operation at any one time. Each satellite circles the globe twice a day with orbits arranged so that at any time, anywhere on earth, there are at least four satellites ‘visible’ in the sky. A GPS receiver is a device that locates at least three satellites to determine its distance to each and uses this information to deduce its own location (Anonymous 7, 2007; Brain and Harris, 2007). Location identification is based on a mathematical principle called trilateration. Trilateration is the location of a single point in space relative to its distance from three other known points. The
GPS receiver calculates location and distance from each of the satellites by timing how long it takes a signal to come from each. Thus, if you are in Denver holding a GPS, its location is computed by computing its distance from three other locations such as, Boise, Tucson and Minneapolis. By computing the difference in time from each satellite to each known point, an exact fourth point -- Denver -- is identified and it accurate to within ten feet (Anonymous 7, 2007; Brain and Harris, 2007).

GPS can tell how far you have traveled, how long you have been traveling, your current and average speeds, and the estimated time of arrival at current speed. Further, a 'bread crumb' trail showing where you have traveled is available to track your trip. GPS tracking data can be stored inside the unit, or sent to a remote computer by radio or cellular modem. Some systems allow the location to be viewed in real-time on the Internet with a web-browser (Brain and Harris, 2007).

**Current GPS Applications and Maturity**

There are few specific applications of GPS in healthcare establishments to date. GPS is used in the health services industry though. For example, GPS guide helicopters transporting patients through poor weather conditions. Another GPS application is for monitoring ambulances in real-time. In poor weather conditions, such as a blizzard, in which vehicular accidents are numerous, a fleet of ambulances could be deployed to drive in high-accident areas and tracked by GPS remotely. When an accident is reported, the nearest ambulance can be identified and deployed more quickly than otherwise possible.

Enhanced 911 (E-911) telephone service requires that, as of October, 2001, GPS locators be installed in every cell telephone in the U.S. and able to be read by operators when cell calls to 911 are made. E-911 enables location-based commerce (L-comm) to help phone companies recoup the cost of E-911 service. Location tracking requires that an RFID tag be placed on the object to be tracked. Then, the GPS receiver locates the object. Together, RFID and GPS enable specific current location identification of anything on earth. The RFID identifies the object, the GPS locates and tracks it.

A less technical application uses GPS in conjunction with a campus data and voice communication system (technical term is premises distribution system or PDS) to assist patients and visitors to navigate hospital buildings (Anonymous 7, 2007).

One clinical GPS use measures biomechanical efficiency in patients. Patients walk on a treadmill while their breath-by-breath energy expenditure, trunk position, and gait are all measured (Terrier and Schutz, 2005).

**Key Issues for Decision Makers**

The benefit of GPS is that it provides location information for a specific object where RFID can provide multiple, conflicting readings on a single device that is read by every reader along its travels. As a result, if tracking life-sustaining equipment, all visited locations might be
known but the actual current position may remain elusive. GPS, provide unique location for a specific item; therefore, GPS has superior tracking for individual objects than RFID. However, GPS is a more expensive technology. As a result, GPS cost-benefit tradeoffs require careful assessment.

RFID might be more cost-beneficial for inventory tracking, while GPS might be more beneficial for tracking of portable, critical-care equipment that moves throughout the facility. RFID might be adequate for tracking humans and for monitoring, e.g., glucose levels; GPS might be more appropriate for managing a fleet of ambulances. Thus, the two technologies can both be deployed to take advantage of their individual characteristics. The managerial issue then becomes one of justifying the expense, developing the infrastructure, and training staff. Much of GPS-tracking capabilities are open-source or available free from Google. As a result, its decision economics become more favorable.

**Nanotechnology**

Now we turn to the technology that has the most radical and far-reaching implications for healthcare. Nanotechnology has become one of the fastest growth areas for all industries but nanotechnology will alter healthcare beyond current recognition. Nano means one-billionth. A nano-sized device is 1/40,000 the width of a strand of human hair. The size alone implies that nano devices will be invisible to the naked eye. Nanotechnology will come in many packages – with biological components, simple small mechanical devices, or as smart motes which will be "complete, wireless subsystem," running tiny operating systems, and outfitted with an antenna connector, serial interface, analog inputs, and digital inputs and outputs" (dustnetworks.com, 2006). Each mote is a small computer, capable of being repurposed once its original task is complete. Motes will be used in healthcare delivery to target medicine to certain types of cells, clean arteries, repair muscles, tendons, or other problems, strengthen weak muscles, and so on. There is no end to the applications of motes. As a result, surgery, healthcare treatment, and even the delivery locations for medical assistance will change.

**Current Applications and Maturity**

Nanotechnology is smaller, faster, consumes less energy, and is capable of cleaning up after itself, leaving a zero-carbon footprint. It will be the next generation of minimally invasive medicine. (Anonymous1, 2006; Parker, 2005).

One of the applications currently under development by dozens of companies is the use of nanotechnology to deliver drugs to specific sites of action to enhance effectiveness while minimizing side effects (Anonymous1, 2006). This application is specifically targeted toward chemotherapy treatments though use of nanopowders and tubes (Anonymous1, 2006; Rickerby, 2006). Nanoparticles also will be used in tissue engineering and in implantable devices (Rickerby, 2006).
Nanoparticles have been developed that serve as super cleaning agents using oxidation to kill pathogens and dissolve organic material (Dobie, 2007; Olla, 2007). Particles are being integrated in fabrics to produce smart shirts that can monitor, for instance, patient skin temperature (Parker, 2005). Even smarter shirts can regulate patient temperature.

Device miniaturization is another area of study including in vitro use of biochips and biosensors for diagnostic purposes (Olla, 2007). The potential exists to conduct diagnosis from remote settings permitting a greater accessibility for patients and mobility for practitioners (Rickerby, 2006). The nanoapplication could conduct not only internal investigation but intracellular as well including DNA analysis (Anonymous2, 2007). Diagnosis may take place through sensors embedded in the plaster of our bathroom walls (Anonymous2, 2007).

Smart motes are just one research area of nanotechnology, but an important one. Motes are not a mature technology as they are still in development, but the promise of their utility is so radically cheaper and easier for healthcare, that globally, thousands of scientists are working on healthcare applications (Nanotech.com, 2009). Smart motes have similar capabilities to RFID with the added benefit that they are virtually invisible, can be reprogrammed dynamically from 'home', and report 'in' to 'home' by piggybacking through any available wireless network. Thus, motes have infinite capacity to deliver healthcare once in situ.

Smart motes have developed from the initial the "Berkeley mote" in 199x, which was 11.7mm3 in size and a miniscule 4.8mm3 in volume (Warneke and Pister, 2004), to several generations that, in 2009, saw development of nano-sized devices in Scotland so that previously pen-point sized motes have now become nano-sized. The next generation should become self-replicating (Merkle, 1990; Freitas and Merkle, 2004).

Applications of nanotechnology in the form of smart motes will be limited only by our imaginations. Since motes can do everything larger computer-driven devices can, literally every facet of healthcare will be affected from intake, which will be instantaneous, to diagnosis which may be fully automated, to x-rays which may be performed by bionanotechnologies such as trained e-coli (Elias, 2005), to surgery which may be internally-conducted, non-invasive procedures performed by programmed motes, to outpatient care and medication delivery which will be managed my motes automatically (NanoCom, 2009). Nanotech applications currently being commercialized include appetite control, bone replacement, cancer treatment, cholesterol monitoring and regulation, diagnostic testing, hormone treatment, imaging, and immunosuppression (Nanotech.com, 2009).

It is imperative that the potential risks associated with nanotechnology be explored. In addition to risk to patients exposed to nanomaterials, risk of occupational exposure to workers must be explored as well (Zolkos, 2006). For instance, for several years, nanoparticles were thought to be sufficiently unobtrusive not to alter cell functioning. However, cells eventually began to disintegrate from nanotechnology presence (Zolkos, 2006). Thus, the materials, their activities, and their interactions with different cyto-environments require further research to ensure their safety.
Key Issues for Decision Makers

There is no end to the applications of motes. As a result, surgery, healthcare treatment, and even the delivery locations for medical assistance will change. Most patients will be outpatients. Motes will be drunk in a cocktail, ingested with food, absorbed through the skin, inhaled, or delivered in other unobtrusive methods (Warneke & Pister, 2004). Since smart motes are reprogrammable, some may be programmed to imbed themselves in, for instance, fat cells, for future deployment.

Nano and smart mote technology, because they will completely alter the financial aspects of medical delivery, bear watching for developments and expected timing of available devices. Some nanotechnology will begin commercialization within the next two to three years. While there will be displacements of medicines or some techniques, the impact will be incremental.

As the timing of infrastructure and larger device replacements comes within a five-year window, plans for buildings, large medical device purchases (e.g., MRI, CAT, etc.) should be placed on hold as the impacts of these developments will be radical and unpredictable. Buildings may no longer be needed or may become highly specialized units equipped with scanning tunneling microscopes (Bedrossian, 1995) capable of 'seeing' nano-sized objects. Similarly, medical equipment purchases should be delayed until the impact of the nano-devices on the use of such devices becomes clear.

Medical devices that are in testing stages now include red cell, white cell, and arterial cleaners (Pelletier, 2008), specific types of muscle-repair devices (Wowk, 1988), and medicine delivery motes (Arnall, 2004).

Medical facilities that survive the changing financial dynamics in a nano-world will be those prepared to literally throw away current equipment and devices, embracing the new technology and radically altering medicine delivery. This radical shift will displace staff, equipment, buildings, and anyone who thinks they will be able to slow its adoption. The favorable economics coupled with the environmentally positive impacts of nano-sized business support in every industry, will drive rapid adoption. Only those who have not spent millions on what will be completely obsolete plant and equipment will survive.

Discussion

This research defines three technologies that are emerging in the healthcare arena. The problem is whether a healthcare organization deploys one of RFID or GPS, deploy both RFID and GPS, or wait for nanotechnology to mature. There is no simple answer to this question but answers can be obtained. The way most organizations determine their next projects are by defining where they feel 'pain.' The point of most pain gets the most attention. The problem with this thinking is that much of the activity supported by these technologies is hidden to the healthcare customer; and those hidden activities tend to be cost generators not revenue generators. As a result, cost-management tends to get less consideration and usually takes the
form of "Cut costs by x%" rather than some rational analysis of the best method of cost reduction. These common practices – pain reduction management and absent-minded management of non-customer facing activities are the worst of times in healthcare management.

The best of times can be derived from a change of management attention to be proactive in determining how best to deploy cost management budgets to reduce overall costs to the organization. By this change of perspective – direct rather than absent-minded management, several steps should be taken. First, the organization should assess its quality of internal (non-customer facing) service to determine how well it actually performs its infrastructure activities, such as inventory management and equipment management and movement. Second, the organization should decide, consciously, if the current level of quality is acceptable and, if not, what is the desired level of quality. Once the goal and current situation are defined, a gap analysis should be performed to determine how best to obtain the desired quality. Some analyses will lead to process improvements. Process leaning, to remove waste steps, and improvements, to optimize needed process steps, may then show a need to improve technology to speed the improved process. At that point, these technologies can be evaluated for their usefulness, cost-benefit in the context, and potential for the future.

In general, RFID and GPS are crude technologies when compared to nanotechnology and smart bionano motes. But, it may be another decade before cost-beneficial commercialization of motes. Then, the issue is waiting or managing the present. If the desire is to improve the present situation, the prescriptions then vary a bit. RFID is tricky, infinitely variable technology for which vendors become the experts. The problem with this is that vendors discuss their technology, not the infinite variety, one of which might be exactly right for your organization. Therefore, for RFID applications, one approach is to obtain space at a generic RFID testing facility, such as that run by University of Arkansas, and test a variety of RFID types and configurations to determine which, if any, will work best in their particular environment.

Once RFID is evaluated, the next step would be to determine, based on cost and performance characteristics, if GPS can be profitably deployed either as a replacement or in conjunction with RFID.

Proactive management and cost-beneficial deployment of RFID and/or GPS technologies can lead to significant cost reductions that can materially alter quality of service in any setting. The best estimates of inventory improvements from the retail sector report as much as $1 Billion in savings over a large retail network (Anonymous, 2005). Significant savings have also been found for the use of RFID and GPS in transportation systems (Chou and Ekawati, 2009).

Summary

Three technologies emerging in the healthcare arena are RFID, GPS, and nanotechnologies. RFID and GPS are both technologies for which current healthcare applications are prevalent. Nanotechnologies are five to ten years into the future but promise to produce a paradigm-shift in materials engineering that will impact not only facilities and
infrastructure management but also the delivery of healthcare. As a result, it is crucial that healthcare managers begin to become knowledgeable about the technologies and their applications if they are to survive in the decades to come. In the interim, improved management of all aspects of healthcare management – customer-facing and hidden, should be evaluated for the potential of cost-beneficial deployment of RFID and/or GPS technologies.

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Does the Receipt of Hospice Services have a Differential Effect on Services Delivered to Nursing Home Residents?: Evidence from the National Nursing Home Survey

Juliet A. Davis, The University of Alabama, jdavis@cba.ua.edu
Rebecca S. Allen, The University of Alabama,
Philip P. Haley, The University of Alabama
Martha R. Crowther, The University of Alabama

ABSTRACT

Background: This study explores differences in the use of advance directives, service delivery, and pain management strategies by hospice utilization and nursing home ownership status. We hypothesize that hospice users and hospice users in not for profit (NFP) nursing homes would be more likely to receive more non-hospice services than would non-hospice users and all users in FP nursing homes.

Methodology: Data for this project comes from the 2004 National Nursing Home Survey. The sample consisted of 11,781 residents. The dependent variable has four levels: no hospice NFP, no hospice FP, hospice NFP, and hospice FP. Chi-square tests were used to examine bivariate differences across ownership status and hospice use. Following this analysis, the data was then analyzed using multinomial logistic regression.

Findings: We found support for our hypothesis in that hospice recipients did have greater use of advance directives, services, and pain management strategies than did non-hospice recipients. Furthermore, nursing home ownership status does impact the use of advance directives, certain services, and pain management strategies for hospice and non-hospice residents. This is evident by the greater use of several of the advance directives, service utilization, and pain strategies measure for the NFP as compared to the FP nursing homes.

Practice Implications: Hospice use may play a key role in improving the service utilization in nursing homes. Previous research found that FP nursing homes experience greater quality and service challenges than NFP nursing homes. However, the presence of hospice care may mitigate some of these potentially negative outcomes.

Keywords: Hospice, palliative care, nursing homes, ownership, for profit, pain management

Hospice care continues to be an important and necessary component of long-term care delivery and its use continues to increase. The extant body of research has shown that the receipt of hospice care improves the end-of-life process for most users across home and institutional settings (Gozalo & Miller, 2007; Mitchell, Morris, Park, & Fries, 2004). The ongoing growth in utilization provides the impetus for research seeking to determine if there is a differential effect in user outcomes by various organizational criteria such as staffing, services delivered, location, payer mix, etc. (Ste-
venson & Bramson, 2009). One important organizational characteristic that has been shown to impact outcomes in other long-term care settings is the ownership status of the provider. There is a rich body of research suggesting that for profit (FP) nursing homes behave quite differently than not-for-profit (NFP) nursing homes and this difference manifests on numerous levels including resident outcomes (Grabowski & Hirth, 2003). What is not known, however, is if users receiving hospice services have an increased likelihood of receiving additional services unrelated to hospice and if ownership status is associated with the receipt of these services. This study seeks to explore these two issues concomitantly. Using a nationally representative sample of nursing homes within the United States, we attempt to delineate differences in the use of advance directives, service delivery, and pain management strategies by hospice utilization and profit status.

**Hospice Use in Nursing Homes**

Estimates of the prevalence of hospice care in nursing homes vary greatly by state (Gozalo & Miller, 2007; Miller & Mor, 2004), with national estimates ranging from 2% (Parker-Oliver, Porock, Zweig, Rantz, & Petroski, 2003) to 24% of residents (Miller & Mor, 2001) and nursing home hospice growth increased from 9.9% in 1990 to 21.5% in 2002 (National Hospice and Palliative Care Organization, n.d.). The range in prevalence rates may be attributed to regulatory and policy barriers to the integration of hospice care in nursing homes (Miller & Mor, 2002, 2004). State policies and healthcare market characteristics either facilitate or discourage collaboration between nursing homes and hospice providers. Miller and Mor (2004) identified state-level factors associated with collaboration between nursing homes and Medicare hospice providers, including age of citizenry in rural and urban areas. States with fewer individuals aged 65 and older residing in rural areas were more likely to have nursing home/hospice collaborations.

Certain indicators suggest improved quality of care for nursing home residents receiving hospice. Gozalo and Miller (2007) found that nursing home hospice residents were more likely to have do-not-resuscitate (DNR) and do-not-hospitalize (DNH) orders, and these orders have been independently associated with decreased risk of hospitalization at the end of life (Dobalian, 2004; Mor et al., 1997). Gozalo and Miller (2007) additionally found that nursing home residents receiving hospice care were less likely to be hospitalized in the last 30 days of life than nursing home residents not receiving hospice care (26% versus 44%, respectively).

There is evidence to indicate problems, however, in the quality of end-of-life care in nursing homes (National Consensus Project for Quality Palliative Care, 2004; Teno, Clarridge, & Casey, 2004; Zerzan et al., 2000). Happ and colleagues (2002) found that most nursing home hospice services were not initiated until the week before death. Bereaved family caregivers of nursing home residents perceive end-of-life care as including inadequate pain control (Reynolds, Henderson, Schulmanm & Hanson, 2002; Teno et al., 2004). Kayser-Jones and colleagues (2006) prospectively studied pain management among hospice and non-hospice residents in two nursing homes. They found no statistically significant differences in the proportion of hospice versus non-hospice residents who had been prescribed opioids and co-analgesics and whose medication was administered around-the-clock or as needed. The authors attributed problems in the adequacy
of pain management in both groups to limited physician availability, lack of pharmacologic knowledge, and limitations of nursing staff.

In summary, the state of the research suggests that not all nursing home-based hospice residents experience consistently better outcomes once they enter hospice. In addition to the clinical factors associated with services delivery and utilization, there are also organizational factors that impact the type of care and services delivered to hospice residents. One key organizational factor that may impact the services delivered is the profit status of the nursing homes.

**Nursing Home Ownership**

There are numerous theoretical and empirical studies in the management and health care literature addressing the motivating principles guiding NFP behaviors (Schlesinger & Gray, 2005; Vitaliano, 2003). According to the seminal theories of Weisbrod (1988), Hansmann (1980), and Bays (1983), NFP firms differ from FP firms along three key dimensions. First, NFP firms offer services that the market may not offer given the cost of the services and/or the nature of the service. Second, NFP firms may focus on aspects or qualities of a service that FP firms may fail to adequately address. Finally, the motivations of NFP firms may differ from that of FP firms, thus ensuring that criteria other than profits are a vital component of service development.

Table 1 provides a brief review of several studies that examined hospice utilization and resident outcomes by profit status. Many of these studies focused on the ownership status of either the nursing home or the hospice care provider and the results clearly show an inconsistency in the findings. While many found that NFP hospice providers were superior across various dimensions of care and service delivery, others found that FP providers experienced equivalent or better success across the same and other dimensions. For example, in two studies of California hospices, the authors found no differences in the number of patient visits by profit status (Ohri, 2008; O’Neill, Ettner, and Lorenz, 2008). However, Lorenz, Ettner, Rosenfeld, et al. (2002) found that FP hospices provided more nursing visits. Although the lack of consistent findings may be partially explained by differences in the setting (nursing home-based versus community-based), the regional location of the service providers (state versus national), and general methodological differences between each study (differences in sample size, analysis techniques, etc.), the germane message for researchers is that further analysis and examination is warranted if we are to understand this phenomenon (Stevenson & Bramson, 2009).

<table>
<thead>
<tr>
<th>Study</th>
<th>Setting and Sample Size</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlson (2005)</td>
<td>9,409 patients in freestanding hospices</td>
<td>FP hospice patients consistently received a narrower range of services than did NFP hospice patients.</td>
</tr>
</tbody>
</table>
Carlson, Gallo, & Bradley (2004) 422 hospices  FP hospice patients received a much narrower range of services than did NFP hospice patients.

Hamilton (1994) 124 hospices  No significant differences in costs, quality were found between FP and NFP hospices.

Jarosek, Virnig, & Feldman (2009) 2,315 hospices  FP hospices less likely to provide palliative radiotherapy as NFP.

Lindrooth, & Weisbrod, (2007) 106,698 hospice patients  Patients in FP hospices have a shorter length of stay than patients in NFP hospices.

Lorenz, Ettner, Rosenfeld, Carlisle, Leake, & Asch (2002) 176 hospices in California  FP hospices provided more nursing visits, long-term care referrals, and had more residents with non-cancer diagnosis than NFP hospices.

Miller & Han (2008) Hospices in 1,174 nursing homes  NFP nursing homes were twice as likely as FP to have specially trained staff and programs for hospice care.

Miller, Kiely, Teno, Connor, & Mitchell, (2008) 796 hospices  Patients in FP hospices had significantly lower unmet pain needs. However, in both FP and NFP hospices, caring for dementia decedents was associated with a lower proportion of “excellent” care ratings.

Ohri (2008) 335 hospices in California  FP and NFP hospices were similar in the number of staff visits and nursing visits per patient, FP hospices were less likely to use skilled nursing providers and social service workers and exhibited lower levels of quality than NFP hospices.

O’Neill, Ettner, & Lorenz (2008) 185 hospices in California  No differences were found between FP and NFP hospices quality of care measures.

Tokarski, C. (2004) 422 U.S. hospices  FP hospice patients are half as likely as NFP hospice patients to receive a full range of services.

Virnig, Moscovice, Durham, & Casey (2004) 365,700 patients in hospitals and hospices  FP hospices are less likely than NFP hospices to locate in rural areas.

Given the distinction between NFP and FP motivations, the foundational hypothesis of many studies exploring differences by ownership is that NFPs will excel in quality. Yet, the lack of consistent findings may lead to a premature conclusion that ownership is not a valuable indicator of service differences. Gunten (2008) asked readers to consider the relevancy of the profit status of hospice care providers. He posits that while there are numerous issues of concern associated with profit status, the issue of quality differences by ownership status continues to be an important topic for both policymakers and researchers alike. Gunten (2008) further states that while the inconsistent findings may lead some to conclude that there are no differences between the two types of organizations, these findings may also support the need for more research. Although, Gunten’s
(2008) editorial focuses on the ownership status of hospice providers, given the number of individuals receiving hospice care in nursing homes, it may be permissible to extend his concerns to the broader array of hospice care locations (Arias & Smith, 2003).

Based on the literature, we predicted that: (1) hospice users would be more likely to have advance directives, receive more services, and use more pain management strategies than would non-hospice users; and (2) hospice users in NFP homes would be more likely to have advance directives, receive more services, and use more pain management strategies than would hospice users in FP nursing homes.

METHODS

Data for this project comes from the 2004 National Nursing Home Survey (NNHS). The NNHS is a publicly available series of nationally representative surveys of nursing homes across the nation and includes information on the services, staff, and residents of these homes. The sampling process consisted of a stratified two-stage probability design. In the first stage, facilities were stratified by bed size and metropolitan area. Within these strata, facilities were then grouped by certification status, hospital-based or freestanding, ownership, geographic region, state, county, and zip code. Next, individual facilities were chosen using systematic sampling with probability proportional to the number of facility beds. Using this method, 1,500 nursing homes were selected and contacted; a total of 1,174 nursing homes chose to participate in the survey.

In the second stage, twelve current residents were selected per facility. From the 1,174 nursing homes sampled, 13,507 residents were chosen for inclusion. The sampling process was designed to allow for generalization back to the entire population of nursing homes (16,000) and residents (1,492,200). After removing observations with missing data the final sample consisted of 11,781 residents (1,281,093 residents nationally).

Variables

The dependent variable was a nominal measure comparing hospice NFP, hospice FP, non-hospice NFP, and non-hospice FP. The measure was derived by merging two variables: (1) receiving services from a hospice special program, and (2) nursing home ownership. The responses were coded as 1 = NFP, no hospice program; 2 = FP, no hospice program; 3 = NFP, hospice program; and 4 = FP, hospice program.

The independent variables of interest captured resident demographic characteristics, financial resources, service needs, advance directives, service utilization, and pain management strategies (Andersen, 1995). One control variable was also included to capture differences associated with resident length of stay.

Four demographic characteristics were included: age, sex, race, and marital status. Age at the time of the interview was entered as a continuous variable. For sex, males were coded as one. Non-Hispanic white residents were coded as one. Residents who were widowed, divorced, separated, never married, living with partner, or single were coded as one.
Medicare and Medicaid captured financial resources. Residents whose primary payor was Medicare or Medicaid the month prior to the survey received a score of one for these variables.

We included five indicators of health status. The number of co-morbidities is a count of the total number of primary and secondary diagnoses reported for each resident. The pain status question asked if the resident had experienced any pain in the past seven days. Bowel and bladder incontinence was measured using two separate variables. The responses for both variables followed a five point scale. Respondents could indicate if the resident was continent (coded as 0), usually continent, occasionally incontinent, frequently incontinent, or incontinent (coded as 4). The final measure captures functional impairment. Activities of daily living sums required assistance with transfer, dressing, eating, toileting, and bathing.

Advance directives includes: a living will, DNR, do not hospitalize, organ donation, autopsy requested, feeding restriction, medication restriction, and other treatment restriction. Residents who did not have these types of advance directives were coded as zero for the advance directive variable and residents who had the advance directive were coded as one.

Service utilization consisted of bladder/bowel incontinence programs and nutritional approaches. We chose these two groups of services because nearly half of all hospice residents are incontinent and many struggle with eating and maintaining their weight. The incontinence question asked if residents were on a toileting plan, bladder retraining, had an external catheter, an indwelling catheter, or any appliances or programs are used to prevent or manage bowel/bladder incontinence. The three measures of nutritional approaches included having a feeding tube, on a weight change program, and using other nutritional approaches. Other nutritional approaches included mechanically altered diet, therapeutic diet, or dietary supplement between meals. Respondents who indicated that an appliance or program was used received a score of one.

The final set of questions focused on the pain management strategies used by nursing homes for residents who reported pain: standing order for pain medication; as needed (PRN) order; non-pharmacological methods; and a general other category. Examples of non-pharmacological pain treatment include distraction, heat/cold massage, positioning, and music therapy. Residents with the order received a score of one.

**Data Analysis**

The dependent variable has four levels: no hospice NFP, no hospice FP, hospice NFP, and hospice FP. To assess differences across ownership status and hospice use, the data on advance directives, service utilization, pain management strategies were analyzed using chi-square tests. Following this analysis, the data was then analyzed using multinomial logistic regression, which allowed us to assess differences by each ownership/hospice category. We used the SVYSET option in Stata Version 10, which accounts for the multi-stage probability design of the NNHS. To achieve model parsimony, summary scores were used in the model for the advance directives, service utilization, and pain management strategies variables.
RESULTS

Table 2 presents the overall sample descriptives. The majority of nursing homes within this sample did not have an established hospice program and were proprietary (M = 1.7; SD = .58). The average age of residents was 81 years; 29 percent of the residents were males; 86 percent were non-Hispanic white elders; and most residents were single.

The measures of financial resources were consistent with national averages. Sixty-one percent of the residents were Medicaid recipients and 13 percent had Medicare.

Clinically, residents had an average of six different diagnoses; 26 percent reported experiencing pain within the last seven days; most were only occasionally incontinent of bowel or bladder; and residents had an average of four ADL impairments.

The most commonly used AD was the DNR order followed by a living will. The most commonly used incontinence programs other not specified programs. The questionnaire did not specify which appliances or programs residents may be using, but drug therapy may be one viable option. Finally, nutritional approaches other than a weight change program and a feeding tube were used more frequently with this population. These approaches may consist of mechanically altered diet, therapeutic diet, or dietary supplement between meals.

The four types of pain management strategies revealed that the most widely used method of pain control was a PRN order, followed by standing orders, and non-pharmacological methods.

Table 2: Sample Descriptives

<table>
<thead>
<tr>
<th>Variables</th>
<th>Percent or Mean</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospice by Profit</td>
<td>1.7</td>
<td>.58</td>
<td>1-4</td>
</tr>
<tr>
<td>Hospice Utilization</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit Status</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Demographic Characteristics</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at Interview</td>
<td>80.61</td>
<td>12.87</td>
<td>1-100</td>
</tr>
<tr>
<td>Sex</td>
<td>29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>86%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Financial Resources</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Service Needs</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Morbidities</td>
<td>6.4</td>
<td>3.15</td>
<td>1-16</td>
</tr>
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</table>
### Table 3: Chi-Square Analysis Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>Mean 1</th>
<th>Mean 2</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>26%</td>
<td>1.75</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>Level of Bowel Incontinence</td>
<td>1.6</td>
<td>1.75</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>Level of Bladder Incontinence</td>
<td>1.9</td>
<td>2.70</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>ADL Impairment</td>
<td>4</td>
<td>1.34</td>
<td>0-5</td>
<td></td>
</tr>
<tr>
<td>Advance Directives</td>
<td>1</td>
<td>1.02</td>
<td>0-8</td>
<td></td>
</tr>
<tr>
<td>Living Will</td>
<td>19%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>DNR Order</td>
<td>59%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>No Hospitalization</td>
<td>3%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Organ Donation</td>
<td>.7%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Autopsy Request</td>
<td>.3%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Feeding Restriction</td>
<td>11%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Medication Restriction</td>
<td>3%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Other Treatment Restriction</td>
<td>9%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Services Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incontinence Programs</td>
<td>0.9</td>
<td>0.69</td>
<td>0-3</td>
<td></td>
</tr>
<tr>
<td>Toileting Plan</td>
<td>31%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Bladder Retraining</td>
<td>1%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>External Catheter</td>
<td>.6%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Indwelling Catheter</td>
<td>7%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Other Appliances/Programs</td>
<td>48%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Nutritional Approaches</td>
<td>0.6</td>
<td>0.60</td>
<td>0-3</td>
<td></td>
</tr>
<tr>
<td>Feeding Tube</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On a Weight Change Program</td>
<td>13%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Other Nutritional Approaches</td>
<td>41%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Pain Management Strategies</td>
<td>0.4</td>
<td>0.84</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>Standing Order</td>
<td>13%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>PRN Order</td>
<td>21%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Non-Pharmacological Method</td>
<td>8%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td></td>
<td>0-1</td>
<td></td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Length of Stay in Years</td>
<td>2.3</td>
<td>3.24</td>
<td>0-42</td>
<td></td>
</tr>
</tbody>
</table>

§Unweighted sample

Table 3 presents the results of the chi-square analysis. This analysis was limited to the three concepts of interest in this study: advance directives, service utilization, and pain management strategies. The overall results show that there were significant differences by hospice/profit status.
for the majority of variables. Furthermore, it appears that the receipt of hospice services increased the likelihood of also receiving many of the services shown in Table 3.

**Table 3: Chi-Square Analysis**

<table>
<thead>
<tr>
<th>Advance Directives</th>
<th>No Hospice NFP %</th>
<th>No Hospice FP %</th>
<th>Hospice NFP %</th>
<th>Hospice FP %</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Will</td>
<td>25</td>
<td>15</td>
<td>34</td>
<td>20</td>
<td>220.05***</td>
</tr>
<tr>
<td>DNR Order</td>
<td>64</td>
<td>55</td>
<td>85</td>
<td>91</td>
<td>229.72***</td>
</tr>
<tr>
<td>No Hospitalization</td>
<td>3</td>
<td>2</td>
<td>11</td>
<td>12</td>
<td>81.73***</td>
</tr>
<tr>
<td>Organ Donation</td>
<td>.8</td>
<td>.6</td>
<td>2</td>
<td>0</td>
<td>4.30</td>
</tr>
<tr>
<td>Autopsy Request</td>
<td>.2</td>
<td>.3</td>
<td>0</td>
<td>0</td>
<td>1.22</td>
</tr>
<tr>
<td>Feeding Restriction</td>
<td>12</td>
<td>9</td>
<td>15</td>
<td>18</td>
<td>45.85***</td>
</tr>
<tr>
<td>Medication Restriction</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>20.84***</td>
</tr>
<tr>
<td>Other Treatment Restriction</td>
<td>10</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>32.55***</td>
</tr>
</tbody>
</table>

**Services Utilization**

<table>
<thead>
<tr>
<th>Incontinence Programs</th>
<th>No Hospice NFP %</th>
<th>No Hospice FP %</th>
<th>Hospice NFP %</th>
<th>Hospice FP %</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toileting Plan</td>
<td>36</td>
<td>29</td>
<td>32</td>
<td>28</td>
<td>58.44***</td>
</tr>
<tr>
<td>Bladder Retraining</td>
<td>.8</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5.50</td>
</tr>
<tr>
<td>External Catheter</td>
<td>.6</td>
<td>.4</td>
<td>4</td>
<td>0</td>
<td>40.09***</td>
</tr>
<tr>
<td>Indwelling Catheter</td>
<td>7</td>
<td>7</td>
<td>11</td>
<td>11</td>
<td>6.98</td>
</tr>
<tr>
<td>Other Appliances/Programs</td>
<td>47</td>
<td>48</td>
<td>59</td>
<td>68</td>
<td>38.15***</td>
</tr>
</tbody>
</table>

**Nutritional Approaches**

<table>
<thead>
<tr>
<th>Feeding Tube</th>
<th>No Hospice NFP %</th>
<th>No Hospice FP %</th>
<th>Hospice NFP %</th>
<th>Hospice FP %</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>On a Weight Change Program</td>
<td>12</td>
<td>13</td>
<td>10</td>
<td>17</td>
<td>9.03*</td>
</tr>
<tr>
<td>Other Nutritional Approaches</td>
<td>42</td>
<td>40</td>
<td>54</td>
<td>48</td>
<td>16.81***</td>
</tr>
</tbody>
</table>

**Pain Management Strategies**

<table>
<thead>
<tr>
<th>Standing Order</th>
<th>No Hospice NFP %</th>
<th>No Hospice FP %</th>
<th>Hospice NFP %</th>
<th>Hospice FP %</th>
<th>( \chi^2 )</th>
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<tr>
<td>PRN Order</td>
<td>23</td>
<td>19</td>
<td>37</td>
<td>31</td>
<td>70.60***</td>
</tr>
<tr>
<td>Non-Pharmacological Method</td>
<td>9</td>
<td>7</td>
<td>22</td>
<td>13</td>
<td>57.87***</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>9.91*</td>
</tr>
</tbody>
</table>

\[ n = 4,559 \text{, } 6,940 \text{, } 116 \text{, } 166 \]

***p<.001; **p<.010; *p<.05

Table 4 presents the results of the multinominal logistic regression analysis. The reference group for the models was no hospice FP nursing homes. The results show that compared to the
reference group, NFP nursing homes not using hospice were more likely to be a non-Hispanic white resident; less likely to be Medicare or Medicaid; less likely to be incontinent of bowel; more likely to have an advance directive; and more likely to be on an incontinence program.

Table 4: Multinomial Logistic Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>No Hospice NFP</th>
<th>Hospice NFP</th>
<th>Hospice FP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Characteristics</strong></td>
<td>RRR Lower Upper</td>
<td>RRR Lower Upper</td>
<td>RRR Lower Upper</td>
</tr>
<tr>
<td>Age at Interview</td>
<td>1.01 1.00 1.02</td>
<td>1.04** 1.01 1.06</td>
<td>1.01 0.99 1.03</td>
</tr>
<tr>
<td>Sex</td>
<td>0.94 0.82 1.07</td>
<td>0.92 0.55 1.54</td>
<td>1.06 0.72 1.55</td>
</tr>
<tr>
<td>Race</td>
<td>1.38* 1.05 1.82</td>
<td>1.24 0.52 2.93</td>
<td>1.02 0.60 1.71</td>
</tr>
<tr>
<td>Marital Status</td>
<td>0.92 0.81 1.05</td>
<td>0.80 0.48 1.34</td>
<td>0.89 0.59 1.33</td>
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<tr>
<td><strong>Financial Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>0.70** 0.56 0.88</td>
<td>0.40* 0.18 0.91</td>
<td>0.49 0.23 1.03</td>
</tr>
<tr>
<td>Medicaid</td>
<td>0.67*** 0.57 0.79</td>
<td>0.32*** 0.20 0.50</td>
<td>0.32*** 0.22 0.47</td>
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<tr>
<td><strong>Service Needs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-Morbidities</td>
<td>1.01 0.98 1.04</td>
<td>1.04 0.96 1.12</td>
<td>0.95 0.88 1.01</td>
</tr>
<tr>
<td>Pain</td>
<td>1.17 0.86 1.60</td>
<td>1.41 0.59 3.38</td>
<td>1.50 0.76 2.96</td>
</tr>
<tr>
<td>Level of Bowel Incontinence</td>
<td>0.89*** 0.85 0.94</td>
<td>1.06 0.86 1.30</td>
<td>1.19* 1.01 1.39</td>
</tr>
<tr>
<td>Level of Bladder Incontinence</td>
<td>1.03 0.98 1.09</td>
<td>1.06 0.86 1.31</td>
<td>1.22** 1.05 1.42</td>
</tr>
<tr>
<td>ADL Impairment</td>
<td>1.02 0.95 1.09</td>
<td>1.49 1.00 2.23</td>
<td>0.97 0.75 1.27</td>
</tr>
<tr>
<td>Advance Directives</td>
<td>1.28*** 1.17 1.39</td>
<td>1.73*** 1.46 2.06</td>
<td>1.71*** 1.48 1.97</td>
</tr>
<tr>
<td><strong>Services Utilization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incontinence Programs</td>
<td>1.15* 1.02 1.29</td>
<td>0.96 0.65 1.43</td>
<td>1.01 0.68 1.50</td>
</tr>
<tr>
<td>Nutritional Approaches</td>
<td>1.00 0.88 1.14</td>
<td>1.09 0.68 1.73</td>
<td>1.25 0.89 1.74</td>
</tr>
<tr>
<td>Pain Management Strategies</td>
<td>1.00 0.84 1.18</td>
<td>1.58* 1.05 2.36</td>
<td>1.45* 1.06 2.00</td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Stay in Years</td>
<td>1.05*** 1.03 1.08</td>
<td>1.04 0.97 1.12</td>
<td>1.01 0.95 1.06</td>
</tr>
</tbody>
</table>

***p<.000; **p<.010; *p<.05
N = 1,281,093; n = 11,781
F(48, 1053) =; Prob > F = .000

The results of the second model reveal that hospice residents residing in NFP nursing homes were significantly more likely to be older; be bowel incontinent; have advance directives; and have one or more strategies in place to manage pain than were residents residing in FP nursing homes not receiving hospice care. However, residents in NFP nursing homes receiving hospice services were less likely to have Medicare or Medicaid as compared to the reference group.
Finally, FP residents receiving hospice were significantly more likely to be incontinent of both bowels and bladder; to have one or more advance directives; to have at their disposal one or more pain strategies; but, less likely to be Medicaid recipients as compared to the reference group.

**DISCUSSION**

The purpose of this project was to explore the relationship of hospice use and nursing home ownership status to advance directives, service utilization, and pain management strategies. We hypothesized that hospice users would generally receive more services than non-hospice users and hospice users in NFP nursing homes would receive more services than hospice users in FP nursing homes. The results show support for our hypotheses. Specifically, hospice recipients did have greater use of advance directives, services, and pain management strategies than did non-hospice recipients. Furthermore, nursing home ownership status does impact the use of these services for hospice and non-hospice residents. The results of Table 3 and Table 4 support this conclusion. For nearly all of the measures shown in Table 3, hospice residents were significantly more likely to utilize the service than were non-hospice residents. While in some cases the differences were negligible (for example, medication restriction, external catheter, feeding tube, etc.), in other cases the differences were pronounced and reinforce the significance of hospice services. This may suggest that although profit status has a differential effect on service delivery (Munn, Hanson, Zimmerman, Sloane, & Mitchell, 2006; Teno, et al., 2007), regardless of profit status, hospice utilization may mitigate negative effects by increasing service delivery (Stevenson & Bramson, 2009).

An interesting finding from this study was that NFP nursing homes and all nursing homes that offered hospice were less likely to have Medicaid and Medicare residents. According to Decker (2008), FP nursing homes tend to serve a substantially larger portion of Medicaid beneficiaries than do NFP nursing homes. Petrisek and Mor’s (1999) study of the distribution of hospice within nursing homes also reported lower proportions of Medicare and Medicaid residents. It is possible that many residents who enter hospice care have not been in the nursing home long enough to convert from private pay to receive either Medicare or Medicaid benefits (Happ, et al., 2002).

**Practice Implications**

More research is necessary if we are to understand the implications of nursing home ownership status and the delivery of hospice care. Clearly, the issue is one of quality and research should add to the discussion by delving into the association between ownership, hospice use, and quality of care. One of the challenges of studying quality of care among this particular population is determining which indicators are the most crucial and yield the desired information. According to Thompson and Chochinov (2006), “indicators of care, such as dehydration, weight loss, and mobilization, used to measure and regulate the quality of care delivered to all residents are not
necessarily appropriate indicators to measure the quality of end-of-life care for residents with life-limiting illnesses” (pg. 381). Yet, Schonwetter (2006) notes that in the near future, the Centers for Medicaid and Medicare Services (CMS) will require hospice providers to monitor and track certain quality of care indicators as a part of CMS’s larger quality initiatives for all long-term care providers. Thus, new indicators of quality of care for hospice residents will improve our understanding of the role of hospice in improving the outcomes for those receiving this service.

Limitations and Future Research

Although the findings of this study fill a gap in the research, the study, nonetheless, has several limitations. First, as a cross-sectional study, we can make no assertions regarding the causal associations between the constructs of interest. However, we can suggest that there is an association between the constructs. Next, while survey data can reveal associations, the information in the data set offers little in the way of explanation. This limitation supports the need for qualitative research exploring differences on the organizational level.

REFERENCES


HOW FOLLOWERS CORRELATE SPIRITUALITY WITH LEADERSHIP PRACTICES

Charles Salter, Schreiner University, crsalter@lake.ollusa.edu

A variety of studies have shown relationships between spiritual well-being and various aspects of general psychological well-being such as marital satisfaction, physical health, social adjustment and stress management (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000; Ellison & Smith, 1991; Graham, Furr, Flowers, & Burke, 2001; Kamya, 2000; Paloutzian & Ellison, 1982; Roth, 1988; Westgate, 1996; Wolf & Stevens, 2001).

Robert, Young, and Kelly (2006) found overall spiritual well-being, existential well-being and religious well-being to each be significant predictors of job satisfaction in the workplace. Existential well-being, F(1, 199) = 52.4, p < .001 (R² = .21), accounted for 21% of the variance in job satisfaction. Religious well-being, F(1, 199) = 6.856, p < .001 (R² = .033), accounted for 3% of the variance in job satisfaction. Bi-variate correlations for both variables were positively correlated. Similarly, Clark et al. (2007) found that spirituality, integration and self-actualization explained 48% of the variation in job satisfaction (R² = 0.48, p = .00). Structural path models revealed that integrating one’s spirituality in the workplace was more important in establishing job satisfaction than simply being spiritual.

In a different area of research, leadership style has been shown to impact multiple areas of follower performance. Kuoppala, Lamminpää, Liira, and Vainio (2008) conducted a meta-analysis on the relationship between leadership style, job satisfaction and job performance. Kuoppala et al. found an association between leadership and job satisfaction, but not with job performance. Burke et al. (2006) in a meta-analysis found that the use of task-focused behaviors is moderately related to perceived team effectiveness and team productivity (.33, .20). Person-focused behaviors were related to perceived team effectiveness (.36), team productivity (.28), and team learning (.56). Leadership in which the leader empowers followers accounted for nearly 30% of the variance in team learning. Transformational leadership is also consistently shown to result in high follower satisfaction, high follower assessment of the leader’s effectiveness and high follower willingness to give extra effort at work. Lowe, Kroeck, and Galen (1996) in a meta-analysis of the Multifactor Leadership Questionnaire (Bass & Avolio, 2002), for example, found positive relationships between transformational leadership and effectiveness across different contexts.

Problem Statement

A variety of studies have found associations between the spiritual well-being of workers and their psychological health and job satisfaction. A variety of studies have also found relationships between the style of leadership used by a leader and the job satisfaction of the
follower. This is particularly true for studies that use the Multifactor Leadership Questionnaire (Bass & Avolio, 2002) as a measure of leadership.

Many qualitative or speculative books have been written that posit that the level of spirituality of a leader impacts the followers’ performance and satisfaction. Almost no empirical evidence, however, exists that addresses how the leaders’ spirituality impacts how the leader leads.

Method

One-hundred twenty-two participants in executive leadership training and graduate programs in leadership agreed to participate in the study. The participants provided an evaluation packet to two colleagues, two subordinates and a supervisor. The packets were mailed directly to the research team for coding. The participants in turn completed four instruments on themselves: the Religious Orientation Scale, Spiritual Well-Being Scale, Daily Spiritual Experiences Scale and the Spiritual Transcendence Scale. All scores were completed before the onset of the leadership training.

Leadership Instruments

*Multifactor Leadership Questionnaire (MLQ)*

The Multifactor Leadership Questionnaire was developed to determine the degree to which leaders exhibited transformational and transactional leadership. The MLQ has undergone many revisions during the past 20 years. The Form 5X contains five transformational leadership subscales, two transactional subscales, and two passive subscales of leadership that together form what is known as the full-range leadership theory.

Bass and Avolio (1990) assert that transformational leaders have a strong set of internal values and ideals and develop followers to their fullest potential. Transactional leaders exchange things of value with subordinates to advance their own, as well as their subordinates’ agenda.

Bass & Avolio (2002) conducted a cross-validation study of the MLQ Form 5X. The study was used to test the convergent and discriminate validities of each subscale through confirmatory factor analysis. The studies consisted of examining nine samples with \( N = 2,154 \), and a second study using five samples with a total of \( N = 1,706 \). The two studies combined provided a sample of \( N = 3,860 \). Reliabilities for the total items and leadership factor subscales ranged from .74 to .94. The validity coefficient for the MLQ was .91 (Bass & Avolio, 2002).

Bass and Avolio conducted a second confirmatory factor analysis using LISRELVII to compare the Goodness of Fit (GFI) and the Root Mean Squared Residual (RMSR) estimates with the MLQ. The GFI values higher than .90 indicated a better fit between the model and the available data (Bentler & Kano, 1990). The RMSR value was considered a good fit if it was less than .05 (Joreskog & Sorbom, 1982). The results if the study indicated that the full range leadership model represented by the MLQ 5X had a goodness of fit (GFI) of .91 and the root mean squared residual (RMSR) was .04. Each was above and below their perspective cut-off criterion respectively.

*Leadership Practices Inventory (LPI)*
The LPI-Self was developed by James Kouzes and Barry Posner to measure five leadership practices of exemplary leadership: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. Psychometric evaluation of the LPI was examined using a sample of 2,876 managers and subordinates who worked in a variety of private and public sector companies (Posner & Kouzes, 1988). Internal reliabilities of the five subscales ranged from .70 to .84 for the LPI-self and .79 to .91 for the LPI-observer. The average of test-retest reliability was .94. A principal components factor analysis (PCA) with varimax rotation was conducted to extract five factors accounting for 59.9% of the variance. The loadings of the five factors ranged from .37 to .73 were reported. An additional examination of the psychometric properties of the LPI involved over 36,000 managers and subordinates representing private and public companies (Posner & Kouzes, 1993). Internal reliabilities for the five subscales of the LPI-self ranged from .70 to .85 and .81 to .92 for the LPI-observer. Test-retest reliability for the five practices was above the .93 level. Five factors were extracted from a PCA with varimax rotation, and accounted for 60.2% of the variance. The findings consistently supported the LPI for measuring the five leadership practices (Kouzes & Posner, 2000).

Leader Behavior Descriptor Questionnaire (LBDQ)

The Leader Behavior Descriptor Questionnaire was developed during the 1950’s in what is typically called the Ohio State studies. The LBDQ-12 was developed by Stogdill in 1963. It is primarily used to measure two dimensions of leadership: emphasis on production and consideration (Stogdill, 1974). Although there are criticisms of the LBDQ, it has been used in well over 100 scholarly studies, particularly in a variety of doctoral dissertations.

Religious and Spiritual Instruments

The Spiritual Well-Being Scale (SWB)

The Spiritual Well-Being Scale (Paloutzian & Ellison, 1982) is a 20-item instrument composed of two subscales of 10 items each. The Religious Well-Being (RWB) subscale assesses the degree to which individuals report that they experience a satisfying relationship with God. Items of the Existential Well-Being (EWB) subscale relate to a sense of life satisfaction and purpose. A combined Spiritual Well-Being (SWB) score provides an overall, general measure of SWB. The scale it is not based on a specific religious or ideological orientation. In addition, the scales have demonstrated good internal consistency and construct validity (Bufford, Paloutzian, & Ellison, 1991; Ellison, 1983; Ellison & Smith, 1991). In a 2001 Factor Analysis, Genia found support for the factorial validity of the SWB scales. Genia reported that the item groupings in her analysis corresponded to the RWB and EWB subscales as designed by the scale’s developers (Ellison, 1983) and that the two scales appear to be measuring unique constructs.
**Spiritual Transcendence Scale (STS)**

The Spiritual Transcendence Scale (STS) (Piedmont, 1999) is a 24-item scale, STS-tot, with three sub-scales: Universality, Prayer Fulfillment, and Connectedness, each with eight items. It employs a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Piedmont reported (1999) acceptable reliabilities, Cronbach’s alpha being 0.87, 0.83, and 0.64 for Universality, Prayer Fulfillment, and Connectedness, respectively.

**Daily Spiritual Experiences Scale**

The Daily Spiritual Experiences Scale “is intended to measure a person’s perception of the transcendent (God, the divine) in daily life and his or her perception of his or her interaction with or involvement of the transcendent in life. The items attempt to measure experience rather than particular beliefs or behaviors” (Underwood & Teresi, 2002, p. 23) Evidence of construct validity was developed through in-depth interviews and focus groups with individuals from many religious perspectives. The authors also conducted a review of scales that attempt to measure some aspects of spiritual experience and drew as well on a variety of theological, spiritual, and religious writings provided by examination of correlations of the DSES with health and quality of life variables. (Underwood & Teresi, 2002).

**Religious Orientation Scale (ROS)**

The Allport-Ross Religious Orientation Scale (ROS) distinguishes intrinsically religious people who are genuinely committed to their faith from the more self-serving extrinsically religious (Allport and Ross, 1967). There is significant support for Allport's assertion that religious individuals with an intrinsic faith are more psychologically adjusted than are those who are extrinsically oriented toward religion (Donahue 1985).

Other studies, however, indicate that the ROS is best described as measuring three factors (Gorsuch & McPherson, 1989; Kirkpatrick 1989; Leong & Zachar, 1990; Genia, 1993). While supporting intrinsic religiosity as a unified construct, analysis of independent data sets has suggested that extrinsic religiousness may consist of two distinct components, use of religion for personal benefits (Ep) and use of religion for social reward (Es).

**Preliminary Factor Analyses**

A factor analysis was conducted for the three measures of leadership: the Multifactor Leadership Questionnaire, the Leadership Practices Inventory and the Leader Behavior Descriptor Questionnaire, and the four measures of religiosity and spirituality: the Spiritual Well Being Scale, Daily Spiritual Experiences, Religious Orientation Scale and Spiritual Transcendence Scale. Using Varimax rotation, five different components had an Eigenvalue greater than 1. Component 1 was generally the leadership component, consisting of the positively loading transformational scales plus contingent reward and the negatively loading passive scales from the MLQ, the leadership scores from the LPI and the production scale from the LBDQ. Component 2 consisted of the Spiritual Transcendence Scale. Component 3 consisted of the two scales from the Spiritual Well-Being Scale and a negative loading for the Daily Spiritual Exercises Scale. Because on the Daily Spiritual Experiences Scale the lower one scores the higher the level of spirituality, this scale actually loaded in the same direction with the
scales from the Spiritual Well-Being Scale. Included in this component was the consideration scale from the LBDQ. Component 4 consisted of the MBE-Active scale of the MLQ. Component 5 consisted of the two scales of the religious orientation scale.

**TABLE 1**

*Exploratory Factor Analysis for Leadership and Spirituality Scales*

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<th>Rotated Component Matrix</th>
<th>Component</th>
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<tr>
<td>MLQ 5X</td>
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<tr>
<td>IIA</td>
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</tr>
<tr>
<td>IIB</td>
<td>.796</td>
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<tr>
<td>IM</td>
<td>.702</td>
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Based on the factor analysis, three different measures of spirituality and religiosity were isolated: Spirituality, consisting of the SWB and DSE scales, Spiritual Transcendence, consisting of the three scales from the STS and Religiosity, measured by the ROS. Because all of these measures generally loaded separately from the component containing measures of leadership, a series of regression analyses were next run to determine the relationship between measures of spirituality and religiosity and eleven measures of leadership: Transformational, Transactional and Passive from the MLQ, Production and Consideration from the LBDQ and Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart from the LPI.

Results

Transformational Leadership

<table>
<thead>
<tr>
<th>Model</th>
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<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
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<td>.081</td>
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<tr>
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<tr>
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<td>5.834</td>
<td>1</td>
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<td>.063</td>
<td>10.311</td>
<td>1</td>
<td>120</td>
<td>.002</td>
</tr>
</tbody>
</table>

Note. (a) STC, (b) External Religious Orientation, (c) SWBE, (d) SWBR

A multiple regression was run using the predictor variables of Spiritual Well-Being Religious Score (SWBR), Spiritual Well-Being Existential Score (SWBE), Daily Spiritual
Exercises Score (DSE), Spiritual Transcendence Prayer Score (STPS), Spiritual Transcendence Universality Score (STU), Spiritual Transcendence Connectedness Score (STC), Religious Orientation – Internal Score (ROI) and Religious Orientation – External Score (ROE) and the criterion variable of 360 degree rating of the leader’s transformational leadership style. Table 2 provides the results of a reduced model for the significant predictor variables. The leader’s Spiritual Transcendence Connectedness score explained eight percent of the variance in how transformational the participants’ followers saw them ($R^2 = .08, B = -.31, p = .00$). The partial correlation, partialing out the effects of ROE, SWBE and SWBR between Spiritual Transcendence Connectedness and transformational leadership was $r_p = -.34$.

The spiritual transcendence scale manual indicates that “high scores represent a belief that a person is like a hub of a wheel, with spokes radiating out in all directions. These "spokes" represent relationships one has, as well as obligations, to those who preceded the person (e.g., parents, grandparents, one's ancestors), to those who co-occupy the current world both immediately (current family, friends, co-workers) and distally (strangers who may be in need), to those who will come after (e.g., children, grandchildren, future generations). The more participants indicated they felt this type of transcendence, the less transformational they were seen by their followers and colleagues.”

(http://evergreen.loyola.edu/rpiedmont/www/STSR.htm).

The leader’s External Religious Orientation score explained an additional eight percent of the variance in how transformational the participants’ followers saw them ($\Delta R^2 = .08, B = .35, p = .00$). The partial correlation was $r_p = .37$. Allport and Ross (1967) define an extrinsic religious orientation as “using religion for their own ends, with values that are always instrumental and utilitarian” (p. 434). Religiously external individuals embrace religious beliefs and attitudes or engage in religious acts in order to promote social or political aims, assist in achieving ordinary, increase social prestige, providing self-justification for actions, comfort, and protection (Laher, 2007; Hettler & Cohen, 1998; Navara & James, 2005). Those high on extrinsic religious orientation turn to God but without turning away from self (Allport & Ross, 1967). Here the more the participant’s religiosity was externally oriented, the more transformational she/he was seen by colleagues and followers.

The leader’s Existential Spiritual Well-Being score explained an additional four percent of the variance in how transformational the participants’ followers saw them ($\Delta R^2 = .04, B = -.39, p = .02$). The partial correlation was $r_p = -.24$. The Existential Spiritual Well-Being (SWBE) relates to a sense of life satisfaction and purpose Sample items for this subscale include "I feel good about my future" and "I believe there is some real purpose for my life." Here the more existentially oriented the participants’ spirituality, the less transformational they were rated.

The leader’s Religious Spiritual Well-Being score explained an additional six percent of the variance in how transformational the participants’ followers saw them ($\Delta R^2 = .06, B = .32, p = .00$). The partial correlation was $r_p = .28$. The Spiritual Well-Being Religious (SWBR) subscale assesses the degree to which individuals report that they experience a satisfying relationship with God. The scale includes items such as "I believe that God is concerned about
my problems" and "I believe God loves me and cares about me." The more religiously oriented the participants’ spirituality, the more they were viewed as transformational.

The two scales that included an aspect of religiosity – the Religious Orientation Scale External and Spiritual Well-Being Religious Scale were both positively related to ratings of transformational leadership, after partialing out the other measures of religiosity and spirituality. The two significant predictors of transformational leadership that lacked a religious foundation – the Spiritual Transcendence Scale – Connectedness and Spiritual Well-Being Scale Existential were both negatively related to ratings of transformational leadership.

Transaction Leadership

A multiple regression was also run using the same predictor variables and the criterion variable of 360 degree rating of the leader’s transactional leadership style. Only one variable was a significant predictor. The leader’s Spiritual Transcendence Connectedness score explained four percent of the variance in how transformational the participants’ followers saw them (R² = .04, B = -.19, p = .03). Similar to transformational leadership, the higher the participants’ scored on spiritual transcendence connectedness the lower they were rated on transactional leadership.

Passive Leadership

Table 3

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
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<td>.078</td>
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<td>4.198</td>
<td>1</td>
<td>122</td>
<td>.043</td>
</tr>
</tbody>
</table>

Note. (a) DSE, (b) STU

A multiple regression for the criterion variable of 360 degree rating of the leader’s passive leadership style found that the leader’s Daily Spiritual Experiences score explained five percent of the variance in how passive the participants’ followers saw them (R² = .05, B = .18, p = .03). After partialing out the effects of Spiritual Transcendence – Universality, the partial correlation between Daily Spiritual Experiences and ratings received on passive leadership was r_p = .19. The Daily Spiritual Experiences Scale “is intended to measure a person’s perception of the transcendent (God, the divine) in daily life and his or her perception of his or her interaction with or involvement of the transcendent in life. The items attempt to measure experience rather than particular beliefs or behaviors; therefore, they are intended to transcend the boundaries of any particular religion.” (Underwood, 2002, p 23.) In interpreting a score on the DSE, the lower one’s score, the more she experiences the daily spirituality. Consequently, the partial correlation of r_p = .19 should be interpreted that the fewer spiritual experiences a participant reported having, the more passive their leadership style was rated.
The leader’s Spiritual Transcendence Universality score explained an additional six percent of the variance in how passive the participants’ followers saw them ($\Delta R^2 = .06, B = -.18, p = .00$). The partial correlation was $r_p = -.18$. “High scores on the STU scale represent a belief that all of life is interconnected. Low scores reflect a more "go it alone" type attitude; that each person needs to rely on him/herself. Humanity may be viewed as simply a collection of individuals, some may be seen as more similar to self than others. There can be a "we versus they" mentality.” For STU, the more the participants described their spirituality as individualistic and unconnected to others, the more passive they were rated in leadership style.

Viewed collectively, the fewer spiritual experiences participants had and the less interconnected to others those spiritual experiences were, the more passive the participants were rated as a leader.

**TABLE 4**

*Spiritual and Religious Predictors of Ratings of Leadership Practices*

<table>
<thead>
<tr>
<th></th>
<th>ROS-E</th>
<th>SWB-R</th>
<th>STP</th>
<th>SWB-E</th>
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<td>$R^2 = .08$</td>
<td>$R^2 = .05$</td>
<td>$R^2 = .03$</td>
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</tr>
<tr>
<td>B</td>
<td>.35</td>
<td>.35</td>
<td>-.28</td>
<td></td>
</tr>
<tr>
<td>$r_p$</td>
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<td>.28</td>
<td>-.23</td>
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</tr>
<tr>
<td>MTW</td>
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<td>$R^2 = .08$</td>
<td>$R^2 = .06$</td>
<td>$R^2 = .04$</td>
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<td>.38</td>
<td>.34</td>
<td>-.44</td>
</tr>
<tr>
<td>$r_p$</td>
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<td>.33</td>
<td>.36</td>
<td>-.37</td>
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<tr>
<td>CP</td>
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</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>$r_p$</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
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<tr>
<td>$r_p$</td>
<td>.27</td>
<td></td>
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<td></td>
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<tr>
<td>EH</td>
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<td>$R^2 = .06$</td>
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<td>.32</td>
<td>.24</td>
<td>-.50</td>
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<tr>
<td>$r_p$</td>
<td>.42</td>
<td>.31</td>
<td>.27</td>
<td>-.41</td>
</tr>
</tbody>
</table>

All five scales of the Leadership Practices Inventory had similar predictors from the spiritual and religious inventories. Generally, External Religious Orientation was the strongest predictor and, after partialing out the effects of the other predictor variables, had a positive relationship. A similar positive relationship was generally found between Religious Spiritual Well-Being and scores on the LPI. A negative relationship was generally found between Existential Spiritual Well-Being and LPI ratings. Finally, positive relationships were found between Spiritual Transcendence – Prayer Fulfillment and Modeling the Way and Encouraging
the Heart. As was seen with Transformational ratings from the MLQ, positive relationships were found for measures of religiosity or spirituality that were centered around a deity and a negative relationship was found for the SWB existential scale.

### TABLE 5

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
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<td>.002</td>
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<td>.054</td>
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<td>1</td>
<td>121</td>
<td>.004</td>
</tr>
</tbody>
</table>

Note. (a) SWBE, (b) STP, (c) External Religious Orientation

A multiple regression for the criterion variable of 360 degree rating of the leader’s focus on production found that the leader’s Spiritual Well-Being Existential score explained eleven percent of the variance in how production oriented the participants’ followers saw them (R² = .11, B = -.37, r_p = -.39, p = .000). The leader’s Spiritual Transcendence Prayer score explained an additional seven percent of the variance in how production oriented the participants’ followers saw them (R² = .07, B = .25, r_p = .27, p = .002). The leader’s Religious Orientation – External score explained an additional five percent of the variance in how production oriented the participants’ followers saw them (R² = .05, B = .23, r_p = .26, p = .004).

### TABLE 6

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
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<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
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<td>1</td>
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<td>.023</td>
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</table>

Note. (a) SWBR, (b) STU

A multiple regression for the criterion variable of 360 degree rating of the leader’s focus on consideration found that the leader’s Spiritual Well-Being Religious score explained
five percent of the variance in how consideration oriented the participants’ followers saw them ($R^2 = .05$, $B = .22$, $r_p = .22$, $p = .013$). The leader’s Spiritual Transcendence Universality score explained an additional four percent of the variance in how consideration oriented the participants’ followers saw them ($R^2 = .04$, $B = -.20$, $r_p = -.20$, $p = .023$).

**TABLE 7**

Differences in Relationships for Theistic and Non-Theistic Measures

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Religious Measures Using God</th>
<th>Religious Measures with Mixed or Implied Use of God</th>
<th>Non-Religious Measures</th>
</tr>
</thead>
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<tr>
<td>TF</td>
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<td>B = .32, $r_p = .28$</td>
<td>B = -.31, $r_p = -.34$</td>
</tr>
<tr>
<td>TA</td>
<td></td>
<td>B = -.19</td>
<td>B = -.19</td>
</tr>
<tr>
<td>P</td>
<td></td>
<td>B = -.18*</td>
<td>B = -.19</td>
</tr>
<tr>
<td>Production</td>
<td>B = .23, $r_p = .26$</td>
<td>B = .25, $r_p = .27$</td>
<td>B = -.37, $r_p = -.39$</td>
</tr>
<tr>
<td>Consideration</td>
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<td>B = -.20 $r_p = -.20$</td>
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<tr>
<td>EOA</td>
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<td>B = .35, $r_p = .28$</td>
<td>B = -.28, $r_p = -.23$</td>
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<tr>
<td>MTW</td>
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<td>B = -.44, $r_p = -.37$</td>
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<tr>
<td>CP</td>
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<td>B = .24, $r_p = .27$</td>
<td>B = -.50, $r_p = -.41$</td>
</tr>
<tr>
<td>ISV</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>EH</td>
<td>B = .40, $r_p = .42$</td>
<td>B = .32, $r_p = .31$</td>
<td></td>
</tr>
</tbody>
</table>

*Reverse Interpretation, the higher the score the fewer spiritual experiences.

**DISCUSSION**

Two measures used in this study, the Religious Orientation Scale – External and the Spiritual Well-Being Scale – Religious, use the phrase God in the questions in the survey. Those two scales, shown in Table 7 were frequently positively related to perceptions that the leader was a transformational leader, measured by the MLQ and LPI. Conversely, the Spiritual Well-Being...
Scale Existential was negatively related to four of the six scales that measure aspects of transformational leadership. Additionally, the Spiritual Transcendence Scale – Connectedness was negatively related to transformational leadership as measured by the MLQ. The SWB-E scale measured general life satisfaction and peace of mind, whereas the Spiritual Transcendence Scale – Connectedness measured the sense one takes actions based on lessons and influences from ancestors who are now dead. Neither of these surveys used the phrase God in their questions.

Several possibilities exist to explain this striking phenomenon. First, recent surveys indicate that approximately 85% of U.S. adults believe in God. Over 40% indicate that they attend church regularly (Barna Group, 2005). Leaders in this study who tended to score higher on external religiosity and spiritual religiosity probably are “readable” by their followers. They may well attend church somewhat regularly, and have a spirituality that is rooted in a strong tradition that is likely understood by most followers. The spirituality of leaders whose spirituality is more existential or “non-theistic” is likely more privately than publicly oriented, and may be less well understood by followers. Followers may well feel a slight dissonance with those leaders, feeling that those leaders can’t readily “relate” to the followers’ values.

Two measures, shown in Table 7 used mixed images of God. The Daily Spiritual Experiences Scale contained some questions specifically using God in the question, and others that were non-theistic. Because this instrument does not have subscales, it is possible that the disparate findings found elsewhere between theistic and non-theistic instruments cancelled each other out on the DSE. The scale called Spiritual Transcendence Scale – Prayer Fulfillment used the term “prayer and/or meditation” in the questions on that scale. Similarly to the DSE, because each question could equally apply to both theistic and non-theistic spirituality, a canceling effect may have resulted on that instrument as well.

Eden & Leviathan (1975) and Lord & Maher (1991) suggest that when leaders values are not shared by followers, communication problems are more apt to occur, even in production oriented communications such as giving instructions for a task. Kouszes & Posner (1993) state that trust in leaders is founded upon the constituent’s ability to predict the leader’s behavior. Bass and Avolio (1994) state that Transformational Leadership is contingent upon the follower’s trust in the leader, and two of its components are idealized influence and spiritual motivation. Idealized influence involves the follower’s desire to adopt and model the values of the leader and spiritual motivation energizes the follower through the leader’s values to work more diligently. When the values of the leader are not shared with the followers or are not well understood it is intuitive to assume that followers will not fully trust, be inspired by, and perhaps will resist modeling the behavior exhibited by the leader, leading to a lower transformational rating.

Two measures, shown in Table 7 used mixed images of God. The Daily Spiritual Experiences Scale contained some questions specifically using God in the question, and others that were non-theistic. Because this instrument does not have subscales, it is possible that the disparate findings found elsewhere between theistic and non-theistic instruments cancelled each other out on the DSE. The scale called Spiritual Transcendence Scale – Prayer Fulfillment used the term “prayer and/or meditation” in the questions on that scale. Similarly to the DSE, because
each question could equally apply to both theistic and non-theistic spirituality a canceling effect may have resulted on that instrument as well. As rated by the External Religious Orientation score, those that appeared to have their beliefs centered in religious beliefs for self interests were also found to be more transformational. Attribution Theory explains how we estimate the motivations of others based on their behavioral manifestations not their intentions. Heider (1958) states that Attribution Theory attempts to explain the phenomenon of how observers explain the behaviors of others, based on the observer’s attachment of meaning to a behavior. He goes on to say individuals once observing the behavior of another the individual then attempts to disseminate whether the behavior was motivated by internal needs or external situational components. An individuals determination of a leader’s or other actors behavior being internally motivated or externally caused depends on three factors: 1) distinctiveness or whether the behavior is considered unusual for this individual, 2) consensus or if other people confronted with a similar situation would respond in a like manner, and 3) consistency or is this behavior similar to how this individual behaves in like situations. We attribute the motivations of those who engage in the religious behaviors to be truly anchored in theistic spirituality even if the motivation of their behavior emanates from self-serving purposes. Our attributions of the motivations of others are not always correct, because we can never fully satisfy ourselves as to the intentions of others. Bass and Steidlmeyer (1999) indicate that this self serving attitude or lack of concern for the overriding collective interest is an inauthentic form of Transformational Leadership or a Pseudo-Transformational Leadership. As stated by these authors, Pseudo-Transformational Leaders substitute the socialized goals of the group for their personalized goals guised as the groups socialized goals.

The Existential Spiritual Well-Being scores indicating those who generally have positive feelings about themselves were less transformational, could be best explained by the findings of Posner & Schmidt (1986). These researchers measured characteristics of admired leaders or the behaviors constituent’s valued most in their leaders. Their research indicated that out of the litany of things valued as characteristics of leaders such as: honesty, forward looking, inspiring, competence, intelligence, and fair mindedness, none of the values indicated that constituents admire leaders who communicate an individual well being of self. The same study did concur with (Bass & Avolio (1994) who indicated that the follower’s of transformational leaders must feel that the leader has their best interest at heart.

So does God matter? The results of this study indicate that leaders whose spirituality is anchored or appears to be anchored in a theistic spirituality in which the image of God as an active presence in the leader’s were more likely to be rated as transformational leaders.

REFERENCES


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Transactions and Institutions: An Organizational Learning Perspective

Adam C. Stoverink, Texas A&M University, astoverink@mays.tamu.edu
Brad Harris, Texas A&M University

ABSTRACT
Organizational learning is a critical component to an organization’s performance over time. In this paper, we discuss a brief historical review of the transaction cost and institutional literatures, interweaving a theme of organizational learning throughout the discussion. In particular, we point out that the fundamental tenets of transaction cost and institutional theories provide two distinct, and seemingly conflicting, views of an organization’s governance structure. We further discuss how these distinctions affect an organization’s ability to learn. Transaction cost theory describes a structure that exists to economize on transaction costs and maximize value creation. Conversely, institutional theory employs institutional pressures to create a structure that conforms to socially acceptable norms and in turn creates valuable external support and legitimacy. Despite the salient divergence between the two theories, this paper examines the potential for a collaborative perspective to help explain organizational learning.

Organizational learning has been defined as the acquisition, dissemination, and shared interpretation of knowledge (Sinkula, 1994). More specifically, it is the “the development of new knowledge or insights that have the potential to influence behavior” (Slater & Narver, 1995, p. 63). According to Argyris (1999), all organizations should engage in organizational learning because the better their learning capabilities, the more likely they are to identify and correct errors, thus fostering adaptation to environmental changes. Ultimately, this detection, correction, and adaptation can influence an organization’s performance by ensuring that policies and procedures related to outputs are continuously improving.

A critical component to an organization’s ability to learn is the governance structure that encourages and constrains organizational behaviors (Fiol & Lyles, 1985). The fundamental tenets of transaction cost theory, or transaction cost economics (TCE), and institutional theory provide two distinct and seemingly conflicting views of how an organization’s governance structure originates. This paper aims to use both theories to describe the distinct forces that influence a firm’s ability to learn. Meyer and Rowan (1977) describe the unique views of TCE and institutional theory as options of efficiency vs. legitimacy respectively. From a TCE
perspective, the foundation of organizational structure lies in the concept of integrating and managing activities that economize transaction costs and maximize value. According to this view, an organization’s behavior is governed through a variety of forces that drive it to select the most efficient structure available. Conversely, institutional theory states that “the interconnectedness of societal relations, the collective organization of society, and the leadership of organizational elites create a highly institutionalized context” (Meyer & Rowan, 1977, p. 353) that governs an organization’s behavior. This perspective claims that by conforming to social norms (i.e., institutionalizing), organizations gain legitimacy and external social support that ultimately contribute to its ability to perform.

The transaction cost view suggests that firm behavior is constrained by a policy of economizing costs and maximizing the value of its economic transactions through efficiency. Conversely, institutional theory explains a structure that imposes social constraints on the behaviors of the firm. These disparate views of organizational governance structure are often in direct conflict with each other. On the one hand, transaction cost theory, or transaction cost economics (TCE), claims that firms exist because they are able to economize on the transaction costs of operating in the market (Coase, 1937). Utilizing a comparative Pareto approach with TCE produces an image of cost control and efficiency. However, maximizing efficiency may at times require an organization to overlook socially imposed pressures. For example, government regulations may require a firm to reduce factory pollution, thus imposing additional costs on the organization. In this context, a focus on strict cost efficiency (ignoring the pollution regulations) is in direct conflict with socially acceptable behavior and the organization will therefore sacrifice valuable legitimacy and social support from key stakeholders. On the other hand, institutionalizing for the sake of legitimacy (abiding by the pollution regulations) may require a firm to allocate resources to socially acceptable behaviors. It is possible that these resources could have been allocated to behaviors that lead to enhanced cost-efficiency rather than social norms. For example an organization may determine that purchasing a supplier will reduce its costs and thus improve the efficiency of its operations. However, social expectations may pressure the organization to contribute to a charitable community mission. If the organization’s budget only allows it to pursue one of these options, a difficult decision must be made. TCE suggests that the organization will purchase the supplier in order to economize on the costs of operating in the market. But according to institutional theory, the firm will forego the potential to minimize costs in order to appease its institutional environment. Therefore, organizations, and more specifically the actors within them, are continuously faced with a balancing act as they struggle to maximize both efficiency and legitimacy.

The purpose of this paper is to identify critical distinctions between transaction cost theory and institutional theory and explain how these views, though quite distinct in nature, can be combined to help explain a firm’s organizational learning abilities. The following sections
discuss both theories in further detail. We begin by explaining learning as it pertains to an organization. We then briefly review the origins and key components of both TCE and institutional theory, highlighting their unique effects on learning. Next, we use a typology of organizational learning systems to suggest that these effects vary depending on context of the learning environment. Finally, we employ the constrained efficiency framework to demonstrate how the two competing theories can actually work in unison to explain a firm’s ability to learn.

ORGANIZATIONAL LEARNING

The success of a firm is largely a function of its strategic choices, adaptations, and governance structure over time (Duncan & Wess, 1978). The effectiveness of these components is determined by the firm’s knowledge base respective to each. For example, the more critical information an organization has about strategic choices, the more effective its decision making will be. Thus, the acquisition, dissemination and shared understanding of relevant knowledge, (i.e., organizational learning) influences the effectiveness of organizational performance, conceptualized as the attainment of goals and the implementation of strategies with the objective of obtaining a competitive advantage (Gephardt & Van Buren, 1996; Kirkman, Lowe, & Young, 1999). Indeed, studies have shown that repetition of an activity can influence the organization’s knowledge of that task and subsequently improve performance through per-unit cost reduction (Ascher, 1956; Wright, 1953).

Organizational learning differs from individual learning, despite that individuals serve as agents of the learning process. An individual’s knowledge transforms into organizational knowledge when it becomes embedded into the policies and practices of an organization. That is, an individual who acquires information regarding a given task does not help the organization learn until he or she communicates this knowledge throughout the firm. The firm’s adoption and dissemination of this knowledge begins the organizational learning process. Organizational learning actually occurs when relevant members of the firm share a common interpretation of this knowledge.

Organizations learn in a variety of different ways. We borrow from Shrivastava’s (1981, 1983) organizational learning systems typology to stratify these various learning methods. This typology is composed of the following of six systems that determine how learning occurs in an organization:

a) One man institution
b) Mythological learning systems
c) Information seeking culture
d) Participative learning systems
e) Formal management systems
f) Bureaucratic learning systems

One man institutions are those in which one key employee (e.g., CEO) is the primary source for all organizational knowledge and learning. He or she serves as a filter, selectively choosing the knowledge that will be disseminated throughout the firm.

Mythological learning systems describe organizations in which stories of key employees and firm activities serve as myths that control the acquisition and dissemination of knowledge among employees. These systems determine the quantity and quality of information, as well as which employees are to receive this knowledge.

Information seeking cultures are norms, values, and beliefs within an organization that foster organizational learning. Organizations with information seeking cultures may encourage employees to continuously question the effectiveness of current practices in an effort to identify areas of improvement and ultimately enhance performance.

Participative learning systems develop teams of employees to resolve issues as they arise. These employees generally possess a significant level of knowledge pertaining to the area in question. The idea underlying these systems is that by bringing together multiple people who are familiar with a specific topic, knowledge can be generated more effectively.

Formal management systems are established processes in which information is guided through the organization. Knowledge such as the information acquired from repetition of tasks is embedded into the organization via dissemination to all relevant employees.

Bureaucratic learning systems are a more stringent version of formal management systems. They are more rigid and impersonal. Subjective knowledge originating from the perspectives of employees is not accounted for; only knowledge that is generated in an objective manner will be utilized.

In the following sections, we explain the differing effects that transaction cost and institutional forces have on an organization’s ability to learn. We then integrate the two theories into each of the six types of learning systems described above. We begin with transaction cost theory.
TRANSACTION COST THEORY AND ORGANIZATIONAL LEARNING

At the core of transaction cost theory is Coase’s (1937) inquiry into the origin of a firm; namely “Why do firms exist?” Simple, yet powerful, this question sparked a flurry of research that truly took off in the 1970s with the work of Oliver Williamson. Both Coase (1937) and Williamson (1975, 1979) agreed that operating in the market’s pricing system has costs associated with it, and these costs can be reduced by internalizing the transactions into a hierarchy. This concept formed the basis of what is commonly referred to as the make-or-buy decision. Entrepreneurs must determine the lowest cost option for all transactions: either internalize into a hierarchical structure (make) or contract through the market (buy). That is, according to TCE, the rationale for the existence of a firm is that their organizational structures foster more efficiency than all other alternatives, including markets (Winter, 1991).

Williamson (1983) defines a transaction as an event that ‘occurs when a good or service is transferred across a technologically separable interface. [The point when] one stage of processing or assembly activity terminates, and another begins’ (p. 104). Transaction costs are the costs associated with monitoring, enforcing and regulating these exchanges. The primary objective of TCE is to economize on the costs of operating into the market and in turn maximize efficiency. As Williamson (1975) explained, there are a variety of factors that play significant roles affecting transaction costs. These factors shape a firm’s governance structure and subsequently influence its ability to learn. Williamson claimed that the uncertainty of future transactions, bounded rationality, opportunism, a small-numbers trading condition, and asset-specificity all contribute to the presence of transaction costs. Firms are thus faced with the challenge of economizing costs that occur as a result of the conditions underlying the transaction (Jones, 1983).

For example, unknown environmental factors that could potentially affect transactions create a certain level of uncertainty. This uncertainty feeds the need for exchange actors to monitor the transactions, a behavior that costs money. If perfect certainty were possible, there would be no need to monitor, and transaction costs would be lower. Bounded rationality describes the cognitive limitations of actors in an exchange. Similar to environmental uncertainty, actors cannot have perfect knowledge when drawing up exchange contracts. Indeed, because of this imperfect knowledge, no complex contract can be truly complete (Williamson, 1998). Errors and omissions are likely, and hence there is a need to monitor the transaction to protect from potential risks associated with these human flaws. Such risks include opportunism, or self-interest with guile, on the part of an exchange partner. This partner may discover a hole in the contract that enables him or her to take advantage of others in the exchange, thus creating an imbalance in the value of the relationship. TCE recognizes that not all people will engage in
opportunisti behaviors, but because there is no way to know who will do so, it is necessary to hedge this risk through monitoring.

Both uncertainty and bounded rationality play a key role in promoting organizational learning. Jones (1998) discussed the importance of human qualities such as curiosity, imagination, and risk-taking in creating value for transactions. He argued that these qualities arise from bounded rationality and uncertainty in a transaction. Indeed, as discussed above, both factors prevent actors from having perfect knowledge and understanding of future transactions. Due to this lack of knowledge, it is imperative that a firm learns by seeking, acquiring, and implementing innovative ways to operate. If perfect knowledge was attainable, there would be no need to acquire new knowledge. Thus, the more uncertain the future is for a transaction and the greater the cognitive limitations of the actors, the more likely a firm is to learn.

Conversely, the lack of knowledge created by uncertainty and bounded rationality can also negatively impact a firm’s ability to learn. For example, the level of uncertainty may be so great that the organization does not even know what knowledge it needs to seek. Thus, it is possible that firms in extremely uncertain environments may expend a disproportional amount of effort on the pursuit of information that ultimately may not be of any benefit to the firm. The acquisition of this type of knowledge will not influence firm behaviors and thus does not constitute organizational learning. Allocating resources toward the pursuit of this knowledge ensures that these resources are not being utilized to seek relevant information and therefore, uncertainty can potentially impede organizational learning.

Bounded rationality can also have an undesirable impact on a firm’s ability to learn. The extent that a decision-maker’s cognitive abilities are limited may influence his or her ability to seek out new, relevant information. These cognitive limitations may also impact an actor’s ability to interpret and implement knowledge that is acquired. If knowledge is not utilized correctly, it is unlikely to result in favorable firm behaviors. Therefore, bounded rationality can affect the quantity, quality, and utility of information, resulting in lower levels of organizational learning.

The small-numbers trading condition occurs when contracts reduce the number of potential alternative exchange partners. This also increases the potential for opportunism. That is, there is no certainty that a promise will be kept. To protect against those who may potentially renege on their agreements, monitoring is once again necessary.

Because small-numbers trading reduces the alternatives for exchange partners, it increases the frequency that partners interact. Increased interaction fosters familiarity and trust between parties. Trust has been found to promote the exchange of accurate, comprehensive, and
timely information (Chiles & McMackin, 1996), thus furthering the opportunities for organizational learning.

Small-numbers trading can also be negatively correlated with organizational learning. The extent that a firm interacts with the same partners continuously over time can limit the amount of new knowledge within the group. It is likely, for example, that the quantity—and not the quality—of partners may enhance a firm’s learning potential. Indeed, Burt (1997) suggested that the presence of many weak ties allows a firm to take advantage of a variety of knowledge spillovers by capitalizing on structural holes that exist in its network. The small-numbers trading condition could limit the number of new, innovative ideas that could be generated by new exchange partners. Thus, a small number of partners can also have a negative impact on organizational learning.

Finally, asset specificity refers to the extent that assets/capabilities are designated to specified transactions and are thus non-transferrable. Investments are made up front for various resources, and these investments can only be recouped through subsequent interactions with specified partners on specified transactions. This can lead to what is referred to as a hold-up, which describes the potential of an exchange partner to misuse rights to the asset, thus shifting the value in his or her direction (e.g., Noteboom, 2000). Asset specificity can refer to a variety of assets including physical assets, human assets, site specificity, dedicated assets, brand name capital, and temporal specificity (Williamson, 1998). Because of the critical boundaries formed by asset specificity, it is considered to be one of (if not the) most influential components of the structure that governs a firm’s transactions. In fact, it is referred to it as “the big locomotive to which transaction cost economics owes much of it predictive content” (Williamson, 1998 p. 36).

Jones (1998) points out that the specificity of assets such as firm competencies and capabilities creates measurement difficulties in the market. Firms subsequently emerge because entrepreneurs recognize the ability to internalize transactions into a hierarchy without the necessity of measuring these costs. That is, in a hierarchy, employees are paid a pre-determined amount, so measuring is unnecessary. Overcoming these measurement errors and controlling transactions in-house enables entrepreneurs to promote risk and innovation that may ultimately lead to the development of new capabilities (Jones, 1998).

Learning can also be slowed by asset specificity. For example, if a firm’s key actor is designated exclusively to one transaction, that transaction will likely benefit from that actor’s current human capital and ability to generate new knowledge. However, because the actor is specified to that single transaction, the organization cannot capitalize on his or her ability to assist with any other transactions. If, on the other hand, the actor was not specified to a single transaction, the firm could reap the benefits of learning across multiple transactions, thus
enhancing organizational learning. Extrapolating this example to a large number of employees and resources could have a substantial negative effect. Therefore, asset specificity can also inhibit organizational learning.

In summary, TCE explains how a firm is governed by a hierarchical structure that exists to economize transaction costs, thereby maximizing efficiency. The forces that shape this structure are those that drive transaction costs: uncertainty, bounded rationality, opportunism, a small-numbers trading condition, and asset-specificity. Firm behavior is therefore constrained by these forces; actors must create contractual structures that minimize costs associated with them. These structures impact a firm’s ability to learn and ultimately perform over time.

I have discussed the positive and negative influences that factors of TCE can have on organizational learning. We now explain how learning can be impacted by a variety of institutional pressures facing the firm.

INSTITUTIONAL THEORY AND ORGANIZATIONAL LEARNING

Meyer and Rowan (1977) introduced institutional theory by identifying a series of myths, labeled institutions, that exist both within the walls of an organization and in the organization’s external environment. Institutions have been defined as “the humanly devised constraints that structure political, economic, and social interactions. They consist of both informal constraints – sanctions, taboos, customs, traditions, and codes of conduct – and formal rules – constitutions, laws, and property rights” (North, 1991). These highly standardized constraints, rules, and routines are reproduced through a process known as institutionalization. The theory claims that organizations adopt institutions that are accepted by other organizations in order to gain legitimacy (positive evaluations) and avoid social sanctions from stakeholders. Thus, institutions serve as structural governance mechanisms that pressure organizations to conform, constraining the firm’s behaviors. According to Hannan and Freeman (1984), these mechanisms have a negative impact on a firm’s ability to learn. They claim that a phenomenon known as inertia impedes the pursuit and acquisition of new knowledge. In particular, the reproduction of norms reduces the likelihood of organizational members questioning policies, procedures, and authorities. Thus, it prevents the free will of the organization from seeking new knowledge that could improve current activities. Additionally, formalized norms that define an organization become moral and political issues. These norms become so ingrained into the true self of the firm and its members that attempts to change are usually met with substantial resistance (Hannan & Freeman, 1984). Therefore, strong institutionalized norms can act as a barrier to learning by impeding the challenge of status quo and by creating a sense of organizational ‘self’ that is difficult, if impossible, to modify.
Because of inertia, the normative “self” of an organization, and social influences from relational organizations, norms become increasingly institutionalized. Once something has been established as a strong institution, it generally endures for a substantial amount of time. Thus, according to Crossan (1999), changes in systems, structures, and routines are therefore a rare occurrence in highly institutionalized organizations.

It is important to point out that individuals and groups within organizations are quite free to learn. These entities are impacted less by inertia than is the organization as a whole. While they are less likely to question the status quo, they are still able to learn through experience. However, an organization cannot capitalize on all the knowledge generated from the groups and individuals within. Bureaucratic red tape within the hierarchy creates a time lag between the original acquisition of knowledge and the adoption of this knowledge by the firm. Thus, by the time the organization is prepared to implement the new knowledge, the changing environment may have already made it irrelevant. Given that the environment is constantly changing, organizations are very rarely able to capture all the learning that occurs within the hierarchy (Crossan, 1999).

While their critical assessment of the impact that institutionalization has on organizational learning appears to be correct, Crossan, Hannan, and Freeman appear to overlook several important factors in this relationship. Indeed, organizational learning can also benefit from institutional norms in a variety of ways. First, structured holes that develop within an institutional environment can promote learning via knowledge spillovers (Burt, 1997). That is, information that is transferred between two firms can be captured by a third party that is not directly involved in the exchange. The third party can have weak ties with one or both of the firms making the transfer, thus enhancing the proximity to the exchange. Second, institutional partners can mutually benefit from access to each other’s resources. For example, critical policies and procedures can be intentionally transferred from one firm to another through social exchanges. Third, monitoring the procedures and policies of other firms can allow an organization to learn new, improved practices. Finally, the collaboration among key actors of multiple firms may enhance the likelihood that new knowledge will be gained for all parties involved.

In sum, whereas institutional norms do seem to impede learning through inertial pressures, these norms can also promote learning through information transfer among firms that are either directly or indirectly linked.

As noted above, institutional theory holds that organizational structures adapt to pressures from prevailing, socially imposed norms (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Once a firm feels the pressures to conform, it then engages in a change process. In an attempt to
uncover the underlying components of these processes, DiMaggio & Powell (1983) describe three types of institutional mechanisms used to influence a firm’s adoption of social norms: (1) coercive isomorphism, (2) mimetic isomorphism, and (3) normative isomorphism.

Coercive isomorphism occurs as a result of political pressures imposed by organizations on which a firm depends (e.g., government agencies, business partners, professional associations, etc.). For example, the government may impose new regulations requiring the adoption of new policies or procedures. Firms must have the approval of the government to operate. Thus, they are forced to abide by the new regulations. Coercive pressures can come in the form of invitation, persuasion, or force, but all elicit a sense of obligation to conform. Influential relations with other organizations and agencies affect the flow of knowledge across firms by limiting what information and other resources can be acquired, disseminated, and used (Oliver, 1997). Knowledge of routines that are not sanctioned by important relational partners can have a substantial negative effect on the firm’s legitimacy, thus leading to a reduction of institutional support, resource flows, and ultimately survival chances. Furthermore, by limiting knowledge flow between firms, coercive forces can have a negative impact on an organization’s learning.

Conversely, coercive pressures can also have a positive effect on learning. For example, new regulations require all firms to disclose additional information, thus enhancing the knowledge flow that occurs between organizations. An organization can use this mandate to its advantage by learning from the information disclosed by other more legitimate firms. Additionally, regulations prohibiting collusion between firms may influence organizations to form many weak ties rather than a few strong ties. These weak ties create opportunities for organizations to fill structural holes and capitalize on knowledge spillover (Burt, 1997). Hence, coercive forces can also promote organizational learning.

Mimetic isomorphism occurs as a result of uncertainty. Organizations that experience uncertainty due to poorly understood technologies (March & Olsen, 1976) or strategic goals tend to imitate organizations that are perceived to be reputable and successful. Typically, organizations that are imitated have established a solid reputation and thus have achieved a high level of legitimacy.

To the extent that the mimicked behaviors create inertial pressures, this type of isomorphism can hamper learning in an organization. That is, firms that rely solely on the institutions of other organizations limit their learning potential to the amount of knowledge that is embedded in those target organizations. A firm using this strategy to “learn” is unlikely to generate any new knowledge of its own that could potentially provide it with a competitive advantage. Thus, mimetic isomorphism can have a negative impact on organizational learning when it serves as a firm’s exclusive learning strategy.
However, despite the potential for an organization to get stuck in an inertial trap, it can still benefit from mimetic isomorphism. The very act of acquiring, disseminating, and embedding the information from other firms is itself an act of learning. Thus, mimicking other organizations is also positively correlated with organizational learning.

The third source of institutional change is normative. These pressures arise from professionalization, or the struggle of an occupational group to control its members and maximize legitimacy through the communication of generally accepted routines (DiMaggio & Powell, 1983; Larson, 1977; Collins, 1979). Universities and professional organizations are both contexts in which professionalization occurs. By interacting with veteran professionals, who act as the gatekeepers to their professions, new members are acclimated to the ‘way things are done around here’.

Inertia plays a key role in the relationship between normative isomorphism and organizational learning. By ensuring that all new members think and act the same as the current membership, the amount of new creative knowledge that could be generated is reduced. Because members do not want to appear different from the collective, they may choose not to “think outside the box”. This reduction in potential creative knowledge has a negative impact on organizational learning.

On the other hand, the tight-knit, like-minded membership fostered by normative pressures is likely to result in collaboration among the group. This collaboration may result in the combined efforts of institutional members to generate new knowledge. Thus, despite the pressures for members to fall in line with existing routines, these normative pressures can also enhance organizational learning by promoting collective interaction (e.g., association conferences, retreats, etc.).

To recap, institutional theory has been credited for explaining forces that shape a firm’s governance structure in a much different way than those described by TCE. Institutional norms act as structural governing mechanisms, constraining an organization’s behaviors. Through coercive, mimetic, and normative pressures, organizations conform to these norms, thus enhancing their legitimacy. These pressures have both positive and negative effects on an organization’s ability to learn. To the extent that inertia impedes new knowledge from being acquired, disseminated, or embedded in the organization, institutional norms have a negative impact on learning. However, to the extent that these norms provide new knowledge that improves firm performance, institutional pressures improve organizational learning.

I have now described the forces within both TCE and institutional theory that shape an organization’s governance structure. We have also explained how these unique forces impact a
firm’s organizational learning, which in turn positively affects organizational performance. Next, we a variety of conditions that determine the effects of these forces on a firm’s ability to learn.

**TRANSACTIONS, INSTITUTIONS, AND ORGANIZATIONAL LEARNING**

As discussed above, organizational learning structures can be stratified into six learning systems (Shrivastava’s, 1981; 1983). We now discuss how each system impacts the relationship between pressures of both transaction cost and institutional theories. See Table 1 for a summary. Positive and negative effects on organizational learning are shown.

<table>
<thead>
<tr>
<th>TCE</th>
<th>Mythological Learning System</th>
<th>Info Seeking Culture</th>
<th>Participative Learning Systems</th>
<th>Formal Mgmt Systems</th>
<th>Bureaucratic Learning Systems</th>
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<tbody>
<tr>
<td>Inst</td>
<td>- Embeddedness + Feedback - Professionalization - Inertia</td>
<td>+/- Coercive pressures</td>
<td>+ Cooperative culture - Antagonistic culture + Embeddedness + Embeddedness</td>
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Table 1. Effects of TCE and institutional forces on organizational learning.

The one-man institution utilizes one key actor to serve as a source for the dissemination of all information. TCE suggests that this type of system leaves the organization vulnerable to both bounded rationality and potential opportunism. With so much authority and responsibility given to one actor, an organization’s ability to learn is highly dependent on this actor’s cognitive abilities. That is, a relatively low level of cognitive ability in the actor will have a negative effect on organizational learning. Conversely, high cognitive ability will be positively correlated with learning. Furthermore, the more autonomy and authority given to the actor, the more opportunity there is for that actor to pursue opportunistic behaviors. Opportunistic behaviors place the interests of the individual actor before the interests of the firm. Thus, given the choice between the two, actors engaging in these behaviors will likely pursue their personal interests rather than initiating organizational learning behaviors. Therefore, a high level of opportunism has a negative impact on organizational learning, while a low level of opportunism has a positive impact on organizational learning.

Institutional forces can also impact the learning abilities of firms employing the one-man institution approach. The single actor in this system can become an institution in itself. For example, the more the collective membership of an organization accepts that this person’s perceptions and biases are flawless, the less likely that a member will question the actor’s decisions. Therefore, because employees do not think outside the box in search of improved
practices, organizational learning is limited to the abilities of one, single person. Conversely, if the single actor encourages feedback from the membership, more new knowledge is likely to be generated. Furthermore, the actor’s ability to observe and imitate other organizations will also impact organizational learning. High abilities will lead to increased learning, whereas low abilities will hamper learning efforts.

Mythological learning systems use stories of actors and organizational activities as norms for shaping a firm’s knowledge sharing procedures. TCE factors such as the number of trading partners and asset-specificity affect organizational learning for firms with this type of learning system. The number of exchange partners a firm utilizes can influence the myths that are generated and disseminated throughout an organization. Transactions will differ depending on which firms are involved in the process. Thus, the myths associated with these transactions, including what information can be shared with which employees as well as how to interact with each exchange partner, will be determined by the firms involved in the transactions. Because interactions with trading partners likely contribute to the development of organizational myths, a high number of partners may lead to many confusing, and possibly even conflicting, myths. The interpretation of myths by the organization’s members is critical to its acquiring and sharing of knowledge. Thus, high number of trading partners can have a negative impact on learning. However, a smaller number of ties likely results in fewer myths that contribute to a greater understanding of the flow of knowledge throughout a firm. Asset-specificity can also impact a firm’s shared myths. The extent that resources are designated to specific transactions increases the complexity of organizational myths. For example, myths generated by actors specific to one transaction are likely to be different than myths generated by actors specific to other transactions. Indeed, myths vary across organizational units, divisions, etc. (Shrivastava, 1983). If the same actor is able to generate myths across the organization rather than exclusively for one division, the myths are likely to be more consistent and less complex throughout the firm. Thus, knowledge flow (learning) is enhanced by less asset-specificity in a mythological learning system.

Institutional theory suggests that forces such as inertia and normative pressures will affect the myths that ultimately impact organizational learning. To the extent that myths are embedded in an organization and thus new knowledge generation is discouraged, inertia will have a negative influence on organizational learning. Similarly, the strength of myths created by professionals in the firm’s institutional environment will also have a negative effect on organizational learning. Conversely, low embeddedness of norms and weak normative pressures will have less of a negative impact on learning.

Information seeking cultures are those in which organizational members are encouraged to continuously pursue new, innovative ways of operating. Bounded rationality and uncertainty
both impact a firm’s learning ability in this type of culture. As discussed above, the lack of perfect knowledge resulting from these two factors drives the need for new knowledge. Thus, high levels of cognitive limitations and environmental uncertainty both have positive effects on organizational learning in information seeking cultures, while low levels reduce the need for new knowledge and therefore impede organizational learning.

Coercive forces stemming from political organizations can have a positive or negative effect on learning in information seeking cultures. As previously noted, rules can regulate the amount of information that can be transferred across organizations. Policies that require information transfer will enhance organizational learning, while policies that prohibit information transfer will impede learning.

Participative learning systems combine groups of people to participate in a collective knowledge-generation process. Asset-specificity and bounded rationality both influence organizational learning in this type of learning system. Participative groups are generally composed of many people who are members in a variety of other groups (Shrivastava, 1983). Thus, this can cause scheduling difficulties, which slows down the learning process. It also spreads members responsibilities too thin, thus reducing the total effort each member allocates for each group. If members are designated exclusively to one group, these issues are resolved. Thus, asset-specificity is positively related to organizational learning. Bounded rationality also plays a key role in organizational learning in this type of system. The success of a participative group in generating knowledge is a function of the cognitive abilities of the group’s members. Therefore, organizational learning is positively correlated with the members’ learning potential.

The firm’s cultural norms impact a firm’s ability to learn in participative learning systems. An internal environment based on trust, sharing, and cooperation will enhance the knowledge generation and transfer within each participative group. Thus, whether the internal environment results from coercive, mimetic, or normative pressures, these norms are positively correlated to organizational learning. Conversely, norms that foster a more competitive, antagonistic culture will discourage learning.

Formal management systems and bureaucratic learning systems both operate in similar ways. They both determine the guidelines by which organizational activities are conducted and knowledge is transferred throughout the firm. Bounded rationality of the actors that determine these guidelines will have a negative impact on organizational learning. Because a firm’s ability to learn is dependent on the effectiveness of these guidelines, the cognitive limitations of its actors influence the learning process. Furthermore, the asset-specificity of these actors also affects organizational learning in these systems. If several actors are each designated to unique areas, this may result in multiple systems within the same firm. Thus, the lack of consistency in
information flow throughout the organization can have a negative impact on learning. Therefore, high asset-specificity can reduce organizational learning in these types of learning systems. Conversely, low asset-specificity can enhance learning by spreading actors across areas and thus creating consistency of the learning systems throughout the organization.

The effectiveness of these learning systems is also determined by the extent to which these systems are embedded as organizational norms. High embeddedness means that the organization is experiencing a high level of shared understanding, and thus information can flow effectively. On the other hand, if the system is not embedded, information flow will be hampered. Thus, high embeddedness of formal management systems and bureaucratic learning systems can contribute to organizational learning, whereas low embeddedness can reduce learning.

In addition to the distinct effects that TCE and institutional pressures have on the various conditions described in Shrivastava’s typology of learning systems, these pressures may also differ depending on the type of learning. That is, the governance structures explained by the two theories will impact learning differently depending on whether the organization is engaging in exploitation or exploration. According to March (1991), “Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution.” That is, exploration is the process of seeking new knowledge while exploitation is concerned with utilizing existing knowledge.

TCE forces such as uncertainty, bounded rationality and opportunism are contributors to exploration, as these factors all limit the knowledge that is available for a firm to use. Therefore, the extent to which a firm has little knowledge of future transactions, it will continue to explore for new knowledge that can help enhance uncertainty. Conversely, a small numbers trade partner condition and asset-specificity can impact a firm’s ability to exploit existing knowledge. The smaller the number of exchange partners in a transaction, the closer the ties become between the partners. The stronger the ties the more homogeneous the partners become. Homogeneous partners tend to adopt the same practices that are used repetitiously, as opposed to heterogeneous groups that tend to use their diversity to derive new practices. The repetitious nature of the small-numbers trading condition allows firms to exploit their practices through continuously improved task performance. Thus, the fewer partners that exist in an exchange, the more able these partners are to exploit existing knowledge. Additionally, the extent to which resources are specified for a given transaction also positively influences knowledge exploitation. That is, the more a resource is used for a specific task, the more effective that resource will be at performing that task. Thus learning and performance are both influenced by a small-numbers trading condition and asset-specificity.
As previously noted, inertia created from institutional pressures can limit a firm’s ability to seek out new knowledge. Thus, knowledge exploration is negatively influenced by institutional pressures. Conversely, inertia can actually have a desirable effect on exploitative learning. By pressuring firms to utilize existing, socially imposed routines rather than searching for new, improved practices, firms will learn through repetitive experience. Thus, inertia can have a positive impact on exploration and a negative effect on exploitation.

Isomorphic pressures also influence both exploration and exploitation processes. Some pressures limit a firm’s ability to seek out new information (e.g., anti-trust regulations prohibiting the transfer of information among firms), while others promote this exploration process (e.g., deregulation in an industry that allows an increase in knowledge transfer). Similarly, some isomorphic pressures also limit the exploitation of knowledge (e.g., rapidly changing environments that require continuous adaptation), while others promote the utilization of existing knowledge (e.g., relatively stable environments that foster continuous in execution of existing practices).

Another interesting component to organizational learning concerns a firm’s absorptive capacity, conceptualized as the ability of a firm to recognize the value of knowledge, acquire that knowledge and implement it into its operations (Cohen & Levinthal, 1990). This concept suggests that the forces described above will only affect organizational learning to the extent that the firm can realize the value of the knowledge and successfully adopt it as practice. Cohen and Levinthal claim that this ability is largely a function of the firm’s existing knowledge stock. That is, the more prior knowledge that a firm possesses, the more able that firm is to learn. In this sense, it would appear that absorptive capacity places a limit on organizational learning. For example, firms with little prior knowledge will be unable to learn to the same extent that firms with more knowledge can. It also implies the possibility that if firms acquire knowledge beyond their absorptive capacity, their failed attempts at assimilating this knowledge will result in a waste of time and resources. Knowledge that exceeds a firm’s capacity can therefore have a negative effect on performance. Thus, according to absorptive capacity, an inverted-U shaped relationship exists between knowledge and performance. Knowledge has a positive impact on performance until it reaches capacity. At that point, any additional knowledge can actually impede performance.

In summary, the same factors that shape a firm’s governance structure through TCE and institutional theory can also impact an organization’s ability to learn and ultimately its organizational performance. However, these relationships vary depending on the learning system established within the organization. Furthermore, the type of learning—exploration or exploitation—can also affect the relationships between these governance factors and
organizational learning. Finally, the extent that a firm can recognize the value of knowledge and successfully implement it will also play a role in these relationships.

**CONSTRAINED EFFICIENCY MODEL**

The governing mechanisms explained by TCE and institutional theory are quite distinct. TCE describes a governance structure that requires a firm to employ an efficiency-maximizing strategy. Organizations attempt to economize on transaction costs in order to achieve maximum efficiency. Forces such as asset-specificity, uncertainty, and bounded rationality affect transaction costs, and therefore govern the organization’s behaviors. Conversely, institutional theory explains a governance structure that requires a firm to conform to institutional norms in order to develop and maintain legitimacy. This theory does not use efficiency as a driving governance force. Rather, coercive, mimetic, and normative pressures constrain the behaviors of a firm. It therefore appears that the forces underlying TCE are at odds with those underlying institutional theory. Thus, organizational learning will be affected differently depending on which forces shape a firm’s governance structure.

Despite the stark contrast between the forces underlying institutional and transaction cost theories, it may be that both sides play key roles in determining the shape of a firm’s structure. In this sense, it is possible to discuss both theories in unison, rather than in competition (Roberts & Greenwood, 1997). In fact, it may be that one cannot be viewed without consideration of the other. In support of this claim, we point to a critical gap in the TCE literature. Winter (1991) stated that a firm exists because it is more efficient than all available alternatives, including the market. This suggests that the TCE perspective is one in which efficiency comparisons are continuously made to ensure that the current structure is more efficient than any new or old alternatives. Indeed, Williamson and Ouchi (1981) stated that “unrealized efficiency opportunities always offer an incentive to reorganize” (p. 355). However, as Williamson (1987) later admitted, TCE is based on a weak-form selection as opposed to a strong-form selection. This indicates that the more efficient (better) structures, not necessarily the most efficient (best) structure will succeed. Because transaction cost theory only explains structural design with considerations of optimal efficiency, and thus implies a strong-form selection, it cannot completely answer the question of why firms exist and what structures they will adopt (Roberts & Greenwood, 1997). Thus, we use a framework proposed by Roberts and Greenwood (1997) to illustrate that a weak-form rationale can theoretically fit the TCE perspective: organizations do attempt to maximize efficiency, but they are ultimately constrained from doing so by institutional norms that require conformity. That is, to the extent that a firm’s environment allows, it will seek to maximize efficiency through technical activities related to transactions. However, if success
requires the adoption of new norms that conflict with efficiency, it must shift these technical objectives down the priority list until the required changes have been met.

Roberts and Greenwood label this model the constrained efficiency model. It states that rather than reorganizing any time there is a more efficient alternative (strong-form), a firm will set a satisficing level of efficiency and only reorganize if efficiency drops below this level. In this view, organizations will tend to maintain their current structure for longer durations than previously suggested by the TCE literature. A firm’s satisficing level is a function of competitive pressures and bounded rationality. If competition is weak, there may be little need to reorganize for the sake of efficiency, and thus a firm can maintain a structure that is not optimally efficient for long periods of time. Additionally, the cognitive limitations of firm actors also affect the ability for a firm to seek out and evaluate new, more efficient structures. Thus, the firm may not even be aware of the most efficient alternatives. Both weak competition and bounded rationality of the exchange actors support a structure that must account for both efficiency and institutional norms. Therefore, organizational learning can be influenced by the governance mechanisms underlying both TCE and institutional theory simultaneously.

DiMaggio & Powell (1991) suggest that an efficiency-seeking nature is appropriate for some firms, but not others. For example, some institutional norms require continuous efficiency-maximizing behaviors. Other institutions may not require efficiency for firms to succeed. This indicates that the extent to which a firm focuses on efficiency as a firm objective is influenced by its institutional environment (Robert & Greenwood, 1997). So according to the constrained efficiency framework, the TCE approach of economizing transactions and maximizing efficiency is actually a function of the competitive and institutional forces that require optimal transaction value (Roberts & Greenwood, 1997). This appears to establish an institution-efficiency continuum. At one extreme are the firms that must conform to strict efficiency criterion and thus adopt a comparative-efficiency (strong form) model, whereas the other extreme consists of firms with weaker competition, and thus the need to be efficient is much lower (Roberts & Greenwood, 1997).

In summary, institutional norms and efficiency forces can be used in unison to shape a firm’s governance structure. For example, strong competitive forces may require an equally strong focus on economizing transaction costs. However, weaker competition attenuates the strain of constantly seeking out new, more efficient methods. Firms in weak competitive environments may enhance their chances of success by focusing less on efficiency and more on adopting social norms that provide legitimacy and improved resource flows. Therefore, the forces affecting a firm’s ability to learn is dependent on the firm’s position along the institution-efficiency continuum.
CONCLUSION

Transaction cost and institutional theories are seemingly conflicting views that help explain the forces behind a firm’s organizational structure. While the former is focuses on optimal efficiency of transactions, the latter is concerned exclusively with legitimacy gained from conforming to socially institutionalized norms. However, despite their obvious differences, they can combine to improve our understanding of the structures that govern firm behavior. Using the constrained efficiency framework, it is possible that firms seek out efficiency only to the extent that their institutional environment requires. Beyond that, firms will adopt new norms in order to gain legitimacy and improve resource flows.

The extent that an institutional environment requires strict efficiency standards will influence an organization’s ability to learn. Highly efficient institutions require continuous learning and innovation to stay competitive. Conversely, environments with weak competitive forces only require innovation to the extent that institutional norms mandate. In fact, these low-competition environments can actually prevent learning through inertial forces that have emerged.

It is important to point out that the factors underlying both TCE and institutional theory can have both positive and negative impacts on organizational learning. The direction of these effects is a function of the condition in which the firm operates. A typology of six organizational learning systems was used to illustrate the unique effects found in a variety of conditions.

Furthermore, organizational learning positively influences organizational performance to the extent that the firm can recognize the value of the information and successfully assimilate it within the firm. After this point, additional knowledge can actually have a negative influence on performance.

REFERENCES


ACCEPTANCE OF MISTAKES AS AN ANTECEDENT OF ORGANIZATIONAL CREATIVITY

Larry Weinzimmer, Bradley University, lgw@bradley.edu
Eric J. Michel, Christopher Newport University, eric.michel@cnu.edu

ABSTRACT

Although researches have enhanced our understanding of creativity, definitive antecedents of the construct remain elusive. While risk-taking has received attention in the organizational behavior literature as a precursor to creativity, there is an absence of research investigating the possibility of acceptance of mistakes as a potential cultural antecedent of creativity. Utilizing both organizational behavior and strategic management literature, we first develop measures of acceptance of mistakes and creativity, establish construct validity, and hypothesize that acceptance of mistakes is positively related to firm-level creativity. In doing so, we empirically demonstrate the ability of acceptance of mistakes to impact creativity at the organizational level.

INTRODUCTION

Over the past thirty years, researchers have significantly advanced our collective understanding and knowledge of creativity as a cultural attribute and its impact on organizations. While researchers have identified attributes of creativity at individual (Amabile, 1997; Perry-Smith, 2006), group (Amabile and Conti, 1999; Vera and Crossan, 2005; Bain et al, 2001), and organizational (Katz and Allen, 1985; Burkhardt and Brass, 1990; Bain, Mann, and Pirola-Merlo, 2001) levels of analysis, definitive antecedents to creativity and an empirical linkage between creativity and organizational performance remains elusive. The identification of antecedents would be beneficial to organizations, as augmented creativity would positively impact innovation and firm-level performance (Von Nordenflycht, 2007).

Accordingly, what are the precursors to creativity? If managers are tolerant of errors by subordinates, will creativity increase? Is creativity enhanced across an enterprise if a firm possesses a culture that is accepting of mistakes? In this paper, we address these questions from a strategic-management perspective. Our primary focus is to propose that acceptance of mistakes, as a cultural attribute, is an antecedent to creativity.
CREATIVITY LITERATURE

Several significant creativity theories have shaped the construct of creativity and the direction of research by management scholars. Amabile (1983, 1988) established a contrast between creativity, the production of original and functional ideas, and innovation, the employment and execution of those ideas. Woodman, Sawyer, and Griffin (1993) hypothesized creativity as a multilevel construct consisting of 10 interrelated factors and directly linked individual creative performance to organizational creative performance. In this model, organizational creative performance was theoretically influenced by an array of characteristics including organizational culture, leadership, and organizational strategy. While this study only considered micro-level characteristics of creativity, our understanding of creativity can be improved by examining creativity from a firm-level perspective, namely examining creativity on firm-level performance. Considering that the vast majority of creativity research is grounded in the organizational behavior domain, there is significant opportunity for researchers to examine creativity across multiple levels of analysis, including organization theory and strategic management.

A comprehensive review of the extant creativity literature yields several attempts to empirically validate factors from the Woodman, et. al., (1993) study. Whereas creativity is a well-documented cultural phenomenon at individual (Amabile, 1997; Perry-Smith, 2006) and group levels (Amabile and Conti, 1999; Vera and Crossan, 2005; Bain et al, 2001), very few scholars have examined creativity as a cultural attribute from a strategic management perspective, let alone examine the relationship between creativity and organizational performance. This is surprising considering that numerous researchers (Drazin, Glynn, and Kazanjian, 1999; Neuman and Wright, 1999; Woodman, Sawyer, and Griffin, 1993) have called for creativity studies to embrace multiple levels of analysis in order to understand the complexities associated with creativity. One such multiple level attribute repeatedly identified in the extant literature is the relationship between creativity and performance. Considering creativity, researchers employ three levels of analysis in an attempt to link creativity with performance. From an individual level of analysis, performance is quantified as demonstrated creativity (Perry-Smith, 2006) and quality (Elsbach and Hargadon, 2006) in individual employee work outcomes. Performance from the group level of analysis has been quantified through several non-financial means. Elsbach and Hargadon (2006) denoted low absenteeism among group members contributing to increased group performance. Gilson et., al. (2005) determined performance by measuring machine reliability, customer response time, and replacement parts expense among service technician teams. Vera and Crossan (2005) identified group performance as teamwork quality.

Our literature review yielded two studies that examined creativity from multiple levels of analysis and three from an organizational level. Taggar’s (2002) work was the first study to: (1) empirically examine the simultaneous impact of individual and group level antecedents of team
performance and; (2) offer a model of creativity from a meso perspective, subsequently yielding a latent variable model of team performance. Recently, a second multiple-level theoretical study developed a model of individual and group level collective creativity (Hargadon and Bechky, 2006). Of the few studies that have analyzed creativity at the organizational level (Katz and Allen, 1985; Burkhardt and Brass, 1990; Bain, Mann, and Pirola-Merlo, 2001), these studies have considered creativity as the dependent variable. Specifically, these studies exclusively focus on the impact and outcomes of research and development teams on organizational creativity and innovation.

With regard to antecedents of creativity, two pioneering theoretical studies (Woodman, Sawyer, and Griffin, 1993; Amabile, et al, 1996) provide the impetus for subsequent research. Woodman, Sawyer, and Griffin (1993) delineated four individual, seven group, and six organizational characteristics influencing creative behaviors. In this work, the authors hypothesized that individual creativity would be increased by organizational cultures that supported risk-taking behaviors. Amabile, et al. (1996) proposed four antecedents to individual creativity: encouragement, autonomy, resources, and challenging work. Encouragement was comprised of supervisory, work group elements, and organizational elements, of which risk-taking was an integral cultural component.

From an organizational perspective, the empirical validation of creativity antecedents would positively enhance innovation, and the execution of original and functional ideas (Amabile, 1983, 1988). Although several studies (Vera and Crossan, 2005; De Clercq, et al, 2008) have empirically linked innovation to various measures of performance, only one study has attempted to empirically examine the relationship between creativity and organizational level performance. Von Nordenflycht (2007) observed a relationship between creativity and performance in 122 US advertising agencies determining a positive, linear relationship between creativity and performance. In this study, performance was measured by three-year growth rates of each advertising agency. However, findings from this study indicated mixed results regarding the relationship between creativity and performance. Moreover, when the researchers found this relationship to exist, only minimal variance was explained.

Strategic management researchers have argued for creativity only if improvements are needed within the company (Hauser, 1998). Potential new combinations of resources are said to be the “core of creativity” and can potentially lead to new competitive strategies for organizations (Nahapiet and Ghoshal, 1998; Grossman, 2007). Moreover, creativity leads to a competitive advantage over other firms, which helps a company succeed and continually grow in the market (Deshpandé, Farley, and Webster, 1993). Unfortunately, previous research has shown mixed results when examining the relationship between performance factors such as revenue or profitability (c.f. Harper and Becker, 2004; Von Nordenflycht, 2007).
ACCEPTANCE OF MISTAKES AS AN ANTECEDENT TO CREATIVITY

Risk tolerance, as an antecedent to creativity in organizations has received considerable attention. Interestingly, while creativity researchers have focused on risk tolerance at the firm level, there is a complete absence of research investigating the possibility of acceptance of mistakes as a potential cultural antecedent of creativity – even though previous studies have clearly delineated between these two constructs (cf. Carson and Langer, 2006).

Researchers have defined risk tolerance as having the determination to pursue risky projects or actions within the organization and having the knowledge of that risk; yet continuing to undertake a project despite the uncertainty of the end result (Walls and Dyer, 1996). El-Murad and West (2003) correlated risk-taking with higher levels of creativity in advertising agencies. Dewett (2007) identified a significant relationship between individual risk-taking and enhanced creativity in research and development teams. Baucus et al (2007) recognized numerous ethical issues surrounding the relationship between taking risks and fostering creativity.

Although similar to risk tolerance, acceptance of mistakes is a fundamentally different cultural variable. Whereas risk tolerance merely suggests the possibility of failure, acceptance of mistakes clearly indicates the existence of failure and corresponding consequences. One stream of literature that examines this difference is research examining organizational improvisation (Weick, 1998; Barrett, 1998; Crossan, 1998). Organizational improvisation applies elements of flexibility, adaptability, and experimentation as cultural attributes. From a micro-level of analysis, several researchers (Langer, 2005; Carson and Langer, 2006) have illustrated the benefits of making mistakes and the impact on mindfully embracing the opportunities presented. From a group and organizational perspective, Vera and Crossan (2004) note the significance of an experimental culture that is acceptant of “competent” mistakes. Moreover, acceptance of mistakes, as a cultural attribute, has been empirically linked to firm-level performance (cite suppressed during review).

Stated differently, risk tolerance focuses on acceptance of risk before an action occurs, while acceptance of mistakes is an ex post facto approach. While we expect these two variables to be correlated, we hypothesize that acceptance of mistakes, as a cultural attribute, is a significant antecedent to creativity. Acceptance of mistakes is a critical predictor of creativity, as it encompasses failed risk-taking behavior and the resulting ripple effect through organizations. In summary, we offer the following hypothesis:

**H1:** Acceptance of mistakes is positively related to the level of creativity in an organization
Control Variables

We identified three contextual control variables based on previous creativity research. Specifically, the control variables we used are company tenure, employee age, and level in the organization.

METHOD

Sampling Issues

The strategy literature suffers from inconsistencies relating to levels of analysis in sampling. Many studies have attempted to measure the cultural dimensions such as creativity by surveying many individuals in very few companies (Calori and Sarnin, 1991). Conversely, other strategic management researchers have attempted to collect data from large cross-sectional samples, but only collect data from one person per company (Denison and Mishra, 1995).

We collected data for three studies. Study one and study two were designed to ensure that we created content valid measures of acceptance of risk and creativity as cultural attributes. The final study attempted to test our hypothesis that acceptance of mistakes is related to firm-level creativity. To overcome inconsistencies with previous research, study three surveyed all employees (as opposed to one employee) in multiple organizations (as opposed to a single organization) in order to assess the mediating relationship of acceptance of mistakes in the culture-firm performance link. In the third study, we surveyed 857 respondents from 21 companies.

Item Development

Based on a review of the extant creativity research, as well as the studies examining acceptance of mistakes, we developed a list of potential survey items to measure acceptance of mistakes and creativity as cultural dimensions. We then performed an inter-rater reliability assessment to address the consistency of the potential items (c.f. Carmines and Zeller, 1991). Specifically, we had a panel of seven experts (defined as academics researchers actively involved in studying organizational culture) to match potential individual survey items with our two dimensions. Values greater than 0.70 are typically acceptable for consistency estimates of inter-rater reliability (Crocker and Algina, 1986). Therefore, when an individual item received an inter-rater reliability score of less than 0.70, that item was dropped as a potential survey item.

Once we established the content and agreement of this content of items, we developed an initial survey of our items. Specifically, we measured acceptance of mistakes using a five-item instrument. Respondents were asked to rate the degree to which each statement accurately
described the culture of their organization (using a five-point Likert scale where 1= strongly disagree, and 5=strongly agree). Similar methods were used to assess creativity, however we were able to draw on existing literature for construct items as it has been empirically tested in previous research.

Control Variables

Previous research has used three control variables when assessing firm-level cultural attributes in organizations. Demographic items for the respondents’ tenure at the company, age, gender and level in the organizational hierarchy have been commonly used (Dewitt, 2007; cite suppressed during review process).

RESULTS

Criterion-Related Validity for Acceptance of Mistakes and Creativity

Two separate studies were completed to develop the comprehensive scales of acceptance of mistakes and creativity.

Study 1

In the first study, respondents of a large midwestern service organization completed our survey instrument to measure acceptance of mistakes as well as creativity and change. Specifically, respondents were asked to agree/disagree using a Likert scale survey instrument in terms of how a particular statement related creativity and acceptance of mistakes. A total of 474 respondents completed the survey.

We found encouraging internal reliability and dimensionality results from this initial survey. We measured internal reliability using the Cronbach’s alpha score. Specifically we found that our measures exceeded Nunneley’s (1967) stringent threshold of 0.70. Moreover, to establish discriminant validity between the sub-dimensional scales of our survey, we utilized Gaski and Nevin’s (1985) procedure for establishing the independence of scales. They advocate examining the internal reliability estimates of measures and inter-correlations between measures to establish preliminary evidence of independence. If measures have higher internal reliability estimates than their correlations with other scales, evidence of independence is established. Of specific interest, note that while acceptance of mistakes and creativity were correlated (.578, p<.01), their respective internal reliability estimates were higher (.82 for acceptance of risk and .80 for creativity), thereby indicating that they are indeed separate constructs.
Study 2

In order to assess replicate the content validity of our measure from study 1 and to assess the criterion-related validity of our measures, we conducted a second study. We collected data from employees in a large, technology-based company using the same measures from study 1. We surveyed these participants across the organization instead of relying upon the perception of the top management team. We also included demographic information based on the extant strategy literature, to provide some possible linkages to causality of certain perceptions. Demographic items collected information on the respondents’ tenure at the company, length of time on current job, gender and level in the organizational hierarchy.

We collected survey data for culture using mail surveys. Our response rate was 45 percent, yielding 412 responses from 44 profit centers.

Consistent with Study 1, we assessed the internal reliability of our acceptance of mistakes measure of culture using Cronbach’s Alpha. Moreover, we again examined the independence of the sub-dimensions of our measure using Gaski and Nevin’s (1985) recommended procedure. The two dimensions we identified remained are highly reliable. Both measures had alpha scores above 0.80, indicating highly reliable measures. Therefore at least 80% of the total score variance for each measure is due to true score variance (c.f., Crocker and Algina, 1986).

Acceptance of Mistakes as an Antecedent of Firm-Level Creativity

Study 3

In order to test the extent to which acceptance of mistakes relates to the level of creativity, we utilized a cross sectional sample across 21 companies with 857 respondents. We required a minimum of 30 responses per company in order to overcome issues from previous research. This yielded a sample of 857 responses. Again we used the methods framework provided by Baron and Kenny (1986). Means, standard deviations, correlations and internal reliabilities can be seen in Table 1.
TABLE 1: MEANS, STANDARD DEVIATIONS, CORRELATIONS, AND INTERNAL RELIABILITIES FOR STUDY 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tenure</td>
<td>9.96</td>
<td>10.78</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>42.24</td>
<td>12.51</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Level</td>
<td>1.61</td>
<td>1.30</td>
<td>.11*</td>
<td>.14**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Gender</td>
<td>.71</td>
<td>.56</td>
<td>.11*</td>
<td>.07</td>
<td>.32**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Creativity</td>
<td>16.65</td>
<td>3.81</td>
<td>-.07*</td>
<td>-.04</td>
<td>.11*</td>
<td>-.05</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>6. Acceptance of Mistakes</td>
<td>14.89</td>
<td>4.21</td>
<td>-.06</td>
<td>-.03</td>
<td>.19**</td>
<td>.04</td>
<td>.67**</td>
<td>.87</td>
</tr>
</tbody>
</table>

Notes: N = 857
* p<.05, ** p<.01

Criterion-Related Validity

In order to assess criterion related validity, we examined the relationships between our dimensions. Specifically, we used hierarchical regression modeling to test this relationship. Additionally, we controlled for demographics of respondents, as previous research has argued that employees’ perceptions are impacted by their level in an organization (Kristof-Brown et al., 2005).

Results of the regression modeling can be seen in Table 2. Before any regression results were interpreted, a complete set of diagnostic procedures was completed to ensure that this modeling technique was appropriate for these data. Specifically, data were checked for normality, patterns in residuals such as heteroscedasticity, and outliers (cf. cite suppressed during review process).

TABLE 2: HIERARCHICAL REGRESSION ANALYSES FOR STUDY 3

<table>
<thead>
<tr>
<th>Dependent variable - creativity</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Tenure</td>
<td>-.08</td>
<td>-.04</td>
</tr>
<tr>
<td>Age</td>
<td>-.02</td>
<td>.03</td>
</tr>
<tr>
<td>Management Level</td>
<td>.14*</td>
<td>-.01</td>
</tr>
<tr>
<td>Gender</td>
<td>-.09*</td>
<td>-.08</td>
</tr>
</tbody>
</table>
Cultural Dimension
Acceptance of mistakes .62**

R-squared .03 .40
Adj. R-squared .00 .39
F .65 34.78**

N=857
*p<.05, **p<.01

Using hierarchical regression modeling (see Table 2), Model 1 included the control variables and Model 2 introduced acceptance of mistakes. It was found that acceptance of mistakes was significantly related to creativity at the p<.01 level and the model explained 39% of the variance in creativity. Therefore, we found strong empirical evidence to support our hypothesis.

DISCUSSION AND CONCLUSIONS

The present study sought to establish construct validity of a measure of acceptance of mistakes and show the link between acceptance of mistakes and creativity. In order to develop this construct validity, we first established the content validity of our measure through an exhaustive literature search of the organizational theory and strategy-based literature that examined creativity and performance. We further strengthened this content validity through inter-rater agreement about the items included in our measure and by establishing the psychometric properties of our measure in terms of its internal reliability and factor dimensionality. In study 2, we again replicated the internal reliability estimates, and we established tentative criterion-related validity of our measure. In study 3, our measure of acceptance of mistakes predicted a substantial amount of variance in creativity at the firm level.

The present research contributes significantly to the strategy literature that studies creativity as it represents the first attempt at showing the impact of acceptance of mistakes, as a cultural attribute, on the level of creativity in an organization. Additionally, our research represents the first full scale attempt to systematically validate a measure of acceptance of mistakes through the establishment of content and criterion validity. Future research should also establish discriminant validity between our measure and other measures such as risk tolerance.

We also note some limitations in the present research. First, we conducted cross-sectional research using a single method of data collection (e.g., surveys). Thus, we cannot exclude the possibility that some of our results occurred in part from this common method bias. Second, we note that our second study occurred in a single organization that had 44 profit centers.
Considerable differences in employee perceptions of creativity between these profit centers could have clouded our results. Therefore we replicated the second study through a large-scale data collection of many organizations in our third study to assess the multi-level predictability of our measure on performance.

In conclusion, the present study sought to develop construct validity for acceptance of mistakes and its effects on creativity. In doing so, we attempted to establish critical facets of validity that allow researchers to answer a basic question: Does our measure assess what we say it measures? Through a comprehensive literature review of the strategic management literature, we developed a measure of acceptance of mistakes. We established preliminary content validity of this measure in study 1. In study 2, we replicated study 1 and established criterion-related validity of our measure. Finally, in study 3 we were able to empirically demonstrate the ability of acceptance of mistakes to impact creativity at the organizational level. Our results encourage us to continue to refine our measure and seek to strengthen expand the application of acceptance of mistakes as an antecedent variable in other culture research.

REFERENCES


ORGANIZATION THEORIES: EVOLUTION, DEVELOPMENT, AND THEORETICAL DEBATES

Mildred Golden Pryor and Sonia Taneja, Texas A&M University-Commerce
Leslie A. Toombs, University of Texas of the Permian Basin
John H. Humphreys, Texas A&M University-Commerce

ABSTRACT

This paper examines theory development and evolution from the perspectives of legitimacy and efficacy, analyzes selected theorists’ debates, supports rigorous testing and grounded theory approaches, advocates the use of evidence-based theory development, and offers the 5P’s Model of Strategic Leadership as an example of a model and related theories that were originated using evidence-based theory development. In addition, we suggest that researchers, faculty members, and business practitioners should be able to contemplate and debate the usefulness of various theories and models with the understanding that application is essential for substantiation of their worth. We offer this paper in order to generate a respectful debate about the introduction of new organization theories. This can occur if those in power in the various educational institutions, business organizations, professional organizations, and media outlets are more open to the creation of conceptual models and theories, the legitimacy and usefulness of which can later be substantiated through application.

INTRODUCTION

The objectives of this paper are: (1) to examine the history of various organization theories and their development from the perspective of legitimacy and efficacy, (2) to analyze selected debates regarding theory development and various theories, (3) to advocate the use of evidence-based theory development, and (4) to provide an example of a model and related theories that we created after reviewing existing theories and determining gaps in terms of implementation and alignment. We are not rejecting the need for rigorous testing of theories. We are simply advocating the proposal of conceptual theories and models for debate and potential usefulness. Then through application of the theories, they can be tested in terms of validity and the extent to which they are useful.

This paper suggests that many very useful new organizational theories and models as well as extensions and adaptations of other theories and models have been, and are being, developed. The difficulties in getting these theories and models considered for legitimacy and usefulness range from realistic questions to superciliousness as struggles and debates continue among theorists, practitioners, and empirical scientists. Walsh, Meyer, and Schoonhoven (2006: 657) suggest other potential problems including “the irrelevance of organization theory,” the
debates among two groups—those who “argue for closer ties to business practice” and those who “argue for maintaining our academic distance,” and the fact that organization theorists “find ourselves so self-critical and . . . fundamentally, adrift.” We would not go so far as to say that we are adrift, but we are perhaps so self-critical that we do not allow theories to be presented so that they can be debated.

We believe that an understanding of, and appreciation for, the history of management and organization theory is valuable. Yet we as management and organization theorists, scholars, and researchers are also aware that times have changed, and continue to change, dramatically. Business planning horizons are much shorter and competitive pressures (often intense) lead to a more rapid rate of business innovation than ever before. We propose that we, as the academicians studying these phenomena, should be thinking innovatively about the theory development process. We suggest that the originators of new theories and models and extensions of existing theories and models should be able to present in the literature for debate and later testing for application potential. To facilitate organization theory development for introduction and application in today’s rapidly changing environment, we advocate the evidence-based approach and other innovative approaches to the creation of new, and the extension of existing, theories and models.

DEBATES AMONG THEORISTS

While various management and organization theories have been empirically tested over the years, many of them were initially proposed as conceptual theories and models and as such, accepted as legitimate prior to empirical testing. Theories are plausible or scientifically acceptable principles and models are representations of reality. The definitions of theories and models do not imply that there is a requirement of quantitative testing and validation in order to for them to be considered legitimate theories. Yet authors such as Hempel (1952) and Feigl (1970), (as cited by Hughes, Price & Marrs, 1986), indicate that the integration of theory construction and theory testing is essential. They suggest that the adequacy of theoretical constructions should be evaluated, and that such evaluation is possible through empirical testability (Popper, 1959), verifiability (Dodd, 1968), or confirmability (Clark, 1969). However, Hughes, Price and Marrs (1986: 1) note that there have been many problems as theorist and empirical researchers attempt to “forge strong links”. They go on to say that a major shortcoming of management research . . . is that it has “addressed relationships between and among theoretical constructs that are not directly observable” such as labor productivity, employee satisfaction, management style, and motivational factors (Marrs, et al, 1986: 1).

Hughes, et al (1986: 15) argue that advantages of a methodology which requires the representation and testing of both measurement and latent construct linkages are as follows: “(1) Statement of theory is more exact; (2) Testing of theory is more precise; and (3) The communication of theory is enhanced”. While we do not agree that such representation and
testing makes the theories more legitimate, we do concur that “Communication of theory is enhanced” (Hughes, et al, 1986: 15). We suggest that the widespread communication of theories and their subsequent visibility increases the perception that they are legitimate.

Theories that are published and quoted in scholarly journal articles, books, and electronic media are often considered legitimate. Yet in today’s quest for methodological rigor, many such theories may be rejected and find themselves relegated to obscurity without having been subjected to visibility in the media. Research in this era of creativity intolerance seems to seek answers to specific minor questions as opposed to the development of conceptual models and theories which can be used to transform organizations and help them survive for the long term. Relevance and practical applicability often dooms research results and conceptual theories to obscurity or the realm of relative insignificance because of the difficulty they encounter in terms of being worthy of publication.

This is contradictory to the suggestion by Daft and Lewin (1993: i) that “. . . . research on new forms of organization requires a new approach, quite different from research typically published in academic journals. This work will be characterized by midrange theory and method, grounded research, and research that does not presume to test hypotheses empirically”. Daft and Lewin (1993) suggest that “researchers can profitably apply midrange methods by studying a limited number of case examples or innovative outliers to understand and develop the labels, variables, and models to explain and define the phenomenon”. They also encourage work that is grounded in field research at organizations that are experimenting with empowerment, inter-organizational collaborations, and transition to a new organizational form or another phenomenon. Daft and Lewin (1993: i) note that “By studying organizations, scholars can build grounded theories incorporating new variables and insights as they increase their own expertise and write up the results”. Daft and Lewin (1993: i) go on to say that “the least promising approach to help define new organizational paradigms is traditional hypothesis-testing research . . . that typically involves a slow multi-year sequence from conception to publication, with the resulting small knowledge yield”.

Pfeffer (1993: 559) states “The study of organizations is arguably paradigmatically not well developed, in part because of values that emphasize representativeness, inclusiveness, and theoretical and methodological diversity”. Van Maanen (1995: 133) indicates that Pfeffer (1993) in his Distinguished Scholar address made a “plea for the development of a firm and consensually approved paradigm to drive organizational theory and research”. Van Maanen (1995: 133) was harsh (and perhaps rightfully so) in his criticism of such a plea as being “insufferably smug; pious and orthodox; philosophically indefensible; extraordinarily naïve as to how science actually works; theoretically foolish, vain and autocratic; and . . . reflective of a most out-of-date and discredited father-knows-best version of knowledge, rhetoric and the role theory plays in the life of any intellectual community”. He notes that “those who would push for paradigmatic purity or unity in our field conveniently ignore the rhetorical elements that underpin and ultimately undermine their own efforts” (Van Maanen, 1995: 133).
Van Maanen (1995: 134) suggests that one problem in organization theory is that “most of us are trained in a logocentric tradition of empirical science with its count-and-classify conventions and taken-for-granted notions of progress”. In discussing the work of Weick (1969, 1979), Van Maanen (1995: 136) noted that “Weick breaches the generic recognizability of normal organizational theorizing with its relentless summaries of past research, propositional chants, pachyderm-like solemnity and off-the-shelf textual formats (i.e., introduction, hypotheses, methods, findings, and conclusions)”. Finally, Van Maanen (1995: 139) says that he is “appalled at much of the organization theory for its technocratic unimaginativeness . . . generalizations . . . (that) display a mind-numbing banality and an inexplicable readiness to reduce the field to a set of unexamined, turgid, hypothetical thrusts designed to render organizations systematic and organization theory safe for science”. He notes that “The goal is not to control the field, increase our prestige, run a tight ship, or impose a paradigm for self-serving or utilitarian ends. The goal is to learn from one another such that our ink-on-a-page theories and consequent understandings of organizations can be improved” (Van Maanen, 1995: 140). He cautions that “scholarly writing practices are not cast in stone . . . (and that going) unconventional ways may be difficult and perhaps lonely, but it is by no means . . . always unwelcome” (Van Maanen, 1995: 142).

So, as indicated in the previous paragraphs, in the 1990s, there were varying opinions about the study of organizations and the resulting theories and models. It is not necessary for us to enter the debate. Rather, we suggest that it is necessary for researchers and authors to decide for themselves the possible repercussions of such a move toward the development of a firm and consensually approved paradigm to drive organizational theory and research. As articles with new theories and models are submitted to journals, is it possible that this desire for a consensually approved paradigm causes some reviewers to reject manuscripts because they consider the new theories and models outside some pre-determined approved paradigm? At least, we should be able to engage in collaboration as well as respectful dissent with other management and organization theorists as Elsbach, K.D., Sutton, R.L., and Whetten, D. 1999 suggest by their article entitled “Perspectives on developing management theory . . . Moving from shrill monologues to (relatively) tame dialogues.”

LINKING THE PAST TO THE FUTURE

Leaders of, and stakeholders in, today’s universities and other institutions, including publishers of scholarly journals, help create and perpetuate a system of theory validation that makes some theories worthy and legitimate while other theories are doomed to anonymity. They do this in a variety of ways. One is through a system that heralds some scholarly journals as top tier, others second tier, and still others third tier. Authors understand what it takes to publish in each of the tiers and in each journal in each tier. It is not just the publishing guidelines that
influence authors as they write. It is also the articles that have been published in the past that
demonstrate what will be acceptable for publication in the future. It is in this system that authors
often have to choose between methodological rigor and practical relevance of theories and
concepts they introduce or attempt to substantiate.

Reflecting on validation in previous eras, we consider the extent to which theories were
validated and the degree to which readers questioned their validity as opposed to their practical
use. Many theories that were accepted as legitimate were subsequently validated under more
rigorous conditions. However, when they were introduced, they were accepted as legitimate
because they were useful and capable of being implemented. As we contemplate various
organization theories, we present a review of the various schools of management as well as the
theories and their originators, the concept of theory substantiation, and the implications for
organizations.

SCHOOLS OF MANAGEMENT

Theories are generally regarded as integral parts of various schools of management
depending on their respective concepts and contributions, not on the basis of theory validation.
The theories are deemed acceptable as they are publicized by writers who deem them worthy,
either the originators of the theories or subsequent writers. Although the theories are sometimes
validated empirically by the originator of the theories, quite often their acceptance as being
legitimate occurs as a result of publicity in respectable journals by respectable writers.

As we discuss the various schools of management, it becomes increasingly evident that
theories and models have been, and are being, developed by conceptualizing new possibilities.
Suddaby (2006: 633) reminds us that “new discoveries are always the result of high-risk
expeditions into unknown territory.” So the researchers, theorists, and practitioners who
brought us new theories and models quite often moved out into uncharted waters, but the
resulting theories and models could then be tested for their usefulness and to determine the
extent to which they were meaningful. We only present a few researchers and theories under
each category or school of management, but each of them helps emphasize the need for, and the
reason to, respect various theories and their originators.

Classical Management Theory

The theories of Max Weber (1952), Henri Fayol (1949), and Lyndall Urwick (1943) are
basically the foundation of classical organization theory. When proposed, their theories were not
the results of rigorous empirical testing. Instead they were the researchers’ beliefs and
viewpoints about organizational realities. Weber (1952) concentrated on such concepts as
division of labor, centralization of authority, and organizational rules and regulations. Fayol
(1949) delineated the elements of organizational administration into planning, organizing,
command, coordination, and control. Also, he developed 14 General Principles of Management—unity of command, unity of direction, discipline, division of work, authority and responsibility, remuneration, centralization, scalar chain, order, equity, stability of tenure and personnel, subordinate of individual to general interest, initiative, and esprit de corps. While often applied in different ways, those 14 principles of management are still respected as legitimate principles.

Urwick’s writings helped crystallize classical organization theory as acceptable to organization scholars. Urwick (1943) added to Weber’s and Fayol’s theories the concepts of span of control, line-staff relationships, and functionalism. He called for improved application techniques because he felt that the rapid growth in scientific knowledge had placed unprecedented strain on man’s powers of organization. He also noted that knowledge of, and interest in, organization and coordination principles and techniques were meager. Urwick seemed to understand organizational theories as scientific knowledge that needed to be understood and applied. However, while scientific knowledge had grown rapidly, people’s understanding thereof had not grown (Urwick, 1943).

Scientific Management

Many of the current theories, concepts and tools relating to organizational and process efficiency and effectiveness trace their roots to the scientific management experts who worked on streamlining the way work was done. The pioneers in Scientific Management included such noted thinkers, writers, and industry experts as Taylor, the Gilbreths, Cooke, Gantt, and Emerson. These experts attempted to provide answers to Urwick’s question in the areas of organization and coordination through their efforts to increase efficiency, productivity, and worker motivation.

Scott and Mitchell (1972: 26) noted that the Scientific Management pioneers “sought . . . to create a society in which all who were employed in the industrial enterprise would find their private interests harmoniously allied in the ceaseless quest for greater productivity. Frederick Taylor (1911) who is known as the Father of Scientific Management noted that “No single element, but rather this whole combination . . . Science, not rule of thumb, Harmony, not discord, Cooperation, not individualism, maximum output, in place of restricted output . . . The development of each man to his greatest efficiency and prosperity” (p. 140).

Frank and Lillian Gilbreth, of Cheaper by the Dozen fame, developed time and motion study concepts and tools (Gilbreth, 1914). Lillian Gilbreth, who had a Ph.D. in Psychology, continued their work long after her husband’s death (Gilbreth & Carey, 1948). Many of the scientific management theories originated in the workplace by people who were practitioners as well as theorists, so in that respect, the theories were applied. However, the rigorous empirical testing of the theories and subsequent statistical analyses were not conducted. The results of the
applications were documented through observation, and theories were declared relevant and valid by the researcher practitioners.

Humphreys and Einstein (2003) indicated that many of the early authors who were classical or neoclassical management theorists and/or scientific management theorists (e.g., Barnard, 1938; Fayol, 1949 and 1955; Follett, 1918 and 1924; the Gilbreths, 1914 and 1948; Taylor, 1911; and Weber, 1952) wrote about concepts and theories that are compatible with today’s transformational leadership theories. Follett (1918) actually moved beyond the earliest concepts of transformational leadership in her discussions of shared power (between management and non-management people) and the idea followers should assist in keeping leaders in control of a situation. Empirical testing could have made Follett’s theories more acceptable in the early 1900’s. However, it is probable that theorists and practitioners in that era would have simply ignored the results of empirical studies as they did Follett’s theories.

Human Relations and Systems Theory

The Human Relations Movement began with the Hawthorne Studies (Rothlisberger and Dickson, 1939) at the Hawthorne Plant of Western Electric. To some extent, the Hawthorne Studies were a rejection of the concepts of Scientific Management as the researchers used concepts from psychology and sociology to explain worker behavior. So, even if the Classical theorists designed a near-perfect organization and Scientific Management principles were also applied, those who were involved in the Human Relations Movement would argue that problems would still occur because of individuals and groups of workers who “did not behave the way that the rational prescriptions of economic man said they should behave” (Scott & Mitchell, 1972: 28). The Hawthorne Studies (Rothlisberger & Dickson, 1939) highlighted the behavioral aspects of the work environment and were the forerunner of later efforts to integrate psychological and sociological concepts into the management of organizations.

Winship (2005) notes that “The concern to elucidate the nature of human relations through dialogical exchange in psychoanalysis certainly anticipated, if not influenced, the evolution of industrial psychology; beginning with the famous Hawthorne Experiments between 1924-1927 led by Elton Mayo (1933: 234) at the Western Electric Company in Chicago”. Mayo (1923, 1930, and 1933) was the first to introduce a “non-directive” form of interviewing which enabled the study participants to more candidly respond to the researchers’ questions. As a result, the employees’ responses proved to be a great deal more illuminating than those obtained through closed questions. Working conditions, i.e., length of breaks, lighting, length of workday, were modified with each condition lasting for 12 weeks. The unexpected results of the studies showed that changes in working conditions had little impact on the levels of productivity. Researchers found that peer group relations among the workers were more influential than working conditions on the level of output. In some subgroups, the peer pressure was applied so strongly that it would restrict productivity. Mayo (1933) found that it was a comprehensible and
interpersonally contented group of workers that was far more productive than an incoherent or antagonistic group. This was a landmark discovery that is now considered vestigial although at the time of the experiment without prevarication the results were directly contrary to the carrot and stick mentality of production management. According to Winship (2005: 235), “Mayo’s classic research became a benchmark for aligning the emotional condition of the worker with his capacity for productivity. Still it is questionable whether the Western Electric Company research would hold up to the rigorous standards required in today’s empirical testing of organizational theories.

While the Hawthorne Studies emphasized the importance of psychological and sociological concepts in the study and management of organizations, it also supported the concept of systems theory because the researchers were able to observe the interdependence of the variables in the system (Henderson, 1935). From the Systems Theory viewpoint, researchers need to understand (1) the interrelated parts of the system and how they are interrelated, (2) the processes that link the systems parts together, and (3) the goals of the system (Johnson, Kast, and Rosenzweig 1967). So, the Hawthorne Studies and Systems Theory provide the backdrop not only for Motivation theories, but also for Organizational Behavior, Leadership, Strategic Management and Process Management theories.

Industrial Humanists, Motivation, and Organizational Behavior

While writers often point to Argyris, Bennis, et al as the thinkers and writers who “kicked off” the industrial humanist era, Scott and Mitchell (1972) disagree. Although they acknowledge the contributions of Argyris, Bennis, et al, they indicate that any discussion of “the scientific interest in human behavior should probably start with . . . Aristotle and Plato” (Scott & Mitchell, 1972: 310). Plato, a student of Socrates, founded the Academy, the first European University. He wrestled with, and uncovered, principles of “order, reason, and right in the inner world of man’s thoughts and consciousness and in the outer world of nature” (Jowett, 1942: 15). For Plato, “logic, metaphysics, and ethics were not complete without politics . . . so Plato wrote the Republic . . . the earliest, and in many respects, the noblest of all works on sociology and political theory” (Jowett, 1942: 15). Aristotle (1943: xiii) was a student of Plato and, like Plato, Aristotle “thought it necessary, first of all, to understand and explain the workings of the human mind and to show what kinds of reasoning were valid and could be relied on to give us sure knowledge of anything what were not. This Aristotle did in a group of treatises . . . called the Logic or Organon”. From Aristotle (1943), we get the concepts of orderly thinking—deductive (syllogistic) reasoning and inductive reasoning. From both Aristotle and Plato, we learn the importance of logic and the belief that one can discover truth by the use of reason.

Industrial Humanists (e.g., Argyris, 1957; Bennis, 1966; Likert, 1932; et al) went beyond the modifications of Classical and Scientific Management theory of the Human Relations Movement. Instead, they sought dramatic changes that would bring about “. . . greater freedom
and satisfaction at work..." as well as "...freedom from oppression and an opportunity for self-determination" (Scott & Mitchell, 1972: 28). For example, Argyris (1957) details the lack of congruence between the demands of the job (organization) and the natural behavior and needs of human beings. This is a behavior concept as well as a systems concept.

Scott and Mitchell also felt that the consideration of Organizational Behavior theories must first include the consideration of "perception, motivation, and personality development (Scott & Mitchell, 1972: 71). Blair (1969: 211) describes perception as "The process is one of selection and organization of sensations to provide the meaningful entity we experience. So people perceive things, situations, people (through their words and actions), etc. Once the perception occurs, people are then motivated to think and/or behave in certain ways. However, the perception itself is influenced by an individual’s personality. While some personality traits are unique to an individual, there are some in personality consistencies that are worthy of scientific study.

Some of the early motivation theories include Maslow’s Theory (1954) and Herzberg’s Theory (1966, 1968). Maslow’s hierarchy of needs includes safety (freedom from fear), love (affectionate relationships), esteem (personal worth and the need to be deemed worthy by others), and self actualization (the need to fulfill one’s potential). Maslow (1954) defines the self actualization need as the need to "...become everything that one is capable of becoming" (p. 16). Once a need is satisfied, it ceases to drive behavior. Herzberg’s two-factor theory (1966, 1968) says that there are two types of motivators—extrinsic and intrinsic. Extrinsic factors include such factors as pay, supervision, working conditions and job security. The extent to which extrinsic factors are absent (or not at an acceptable level) causes job dissatisfaction, but their presence above the acceptable level does not cause job satisfaction. Intrinsic motivation factors include achievement, recognition, responsibility for work, etc. Intrinsic factors cause job satisfaction (Herzberg (1966, 1968).

Expectancy theory was originally developed by Lewin (1951) and specifically applied to motivation at work by Vroom (1964). Vroom noted that the extent to which individuals expect outcomes to satisfy to satisfy them will cause the individuals to be motivated to move toward achieving those outcomes. He discusses valence (the anticipated satisfaction) versus actual satisfaction from the outcome. This gave managers a theory that said they should understand what outcomes will motivate individuals so that they can provide, and/or assist in worker achievement of, those outcomes (Vroom, 1964). As these and other theories of motivation were discussed, Festinger (1957) published The Theory of Cognitive Dissonance noting that when individuals do something that is counter to what they believe, they will experience cognitive dissonance. This theory is important to managers who require workers to perform jobs that they find distasteful or which they believe contradict their own personal values.

B.F. Skinner (1971: 16) postulates that “behavior is shaped by its consequences”. He indicates that there are two types of behavior (1) operant behavior which requires a reinforcer (i.e., a stimulus) which increases or decreases the probability of a response and (2) respondent
behavior which is the result of direct stimulation such as contact with a sharp or hot object. The stimulus in operant behavior is at the unconscious level. Skinner discusses the interaction of the organism (man) and his environment and the application of the concepts of freedom and dignity. In his discussions of freedom, he notes that literature on freedom encourages people to escape from aversive control by weakening or destroying the power of the controllers. Skinner (1971: 39) notes that “Man’s struggle for freedom is not due to a will to be free, but to certain behavioral processes characteristic of the human organism, the chief effect of which is the avoidance of or escape from ‘aversive’ features of the environment”. He goes on to say that these aversive features were “intentionally arranged by other people” (Skinner, 1971: 39). “Freedom is an issue raised by the aversive consequences of behavior, but dignity (requires) positive reinforcement” (Skinner, 1971: 41). In other words, when people receive positive consequences for their behavior, they are more likely to demonstrate that same behavior.

**Leadership and Governance Theories**

The earlier theories of management, particularly classical management, preferred an autocratic governance structure where the elite would control the unenlightened workers. Seeing these workers as ignorant, corrupt, and weak, managers felt the need to exercise great repressive power through centralized authority and a rigid chain of command (Scott & Mitchell, 1972).

The fact that democratic governance is the exact opposite of autocratic governance is demonstrated in a statement by Schlesinger (1949: 250) which says “The reform of institutions becomes an indispensable part of the enterprise of democracy. But the reform of institutions can never be a substitute for the reform of man. Democratic theory assumes that people’s dependence on others should be minimized so that they can realize their dignity, goodness, and freedom (Schlesinger, 1949).

Bennis (1966: 51) says that democratic governance has forced several things: (1) the re-conceptualization of man (man is aware and rational) (2) a new concept of power (management and workers can collaborate) and (3) organizational values (now with a more humanistic bias that reinforces man’s natural inclination toward democracy). The work of Bennis (1966), Argyris (1957), and Maslow (1965) has had major impact on the change from autocratic governance to a more democratic type of governance.

Bennis (1959) noted that management and leadership are different. To Bennis (1959) management is a process where workers are asked to execute specific duties and accomplish specific objectives whereas leadership involves a person exerting social influence over an individual or a group. Author, et al (1998) concur with Bennis when they state that people follow leaders because they want to, and they follow managers because they have to (i.e., because of their formal authority over them).
Leadership may be described in a variety of ways, such as (1) transformational, transactional, or charismatic or (2) autocratic, participative, democratic, or laissez faire. Regardless of leadership type, all leaders have one common denominator—followers. This is where psychodynamic theories are essential. Many theorists suggest that leaders are able to attract, engage, and motivate followers because of their traits (Stogdill, 1959), their perceived fairness (Adams, 1963), their transformational leadership (Bass, 1985, Burns, 1978; Tichy, 1984; Tichy & Ulrich, 1984; Einstein & Humphreys, 2001, their charisma (Choi, 2006), their flexibility (Fiedler, 1967) or their knowledge of how to motivate people (Maslow, 1954; McGregor, 1960; Herzberg, 1966, 1968; Skinner, 1953, 1971; Vroom, 1964; McClelland, 1985) or their use of empowerment (Block, 1987).

However, other theorists believe that followers choose the people they want to follow, and that they do it based on the concept of transference. Maccoby, (2004: 77) says that “. . . followers are described largely in terms of their leaders’ qualities . . . merely responding to a leader’s charisma or caring attitude.” Maccoby (2004) also notes that this is wrong because “followers have their own identity . . . and followers are as powerfully driven to follow as leaders are to lead”.

While there are differences of opinion regarding leadership and governance theories and models, such differences do not mean that one theory is more legitimate than another. Rather, the different theories and models are subjects to be studied, discussed, and where applicable, applied. Through application, the theories and models will be subjected to testing that is far more rigorous than that which is suggested as a requirement for theory and model legitimacy.

**Strategic Management/Strategic Leadership**

Allio (2006: 4-13) states “Judged by their impact, utility, and longevity, there are 10 big ideas . . . that have been the cornerstones of strategic thinking: Long-range planning, Strategic analysis, Quality, Portfolio theory, Scenario planning, Resource allocation models, Corporate culture, Leadership craft, Metrics that matter, and Strategic alliances.” We find it interesting, but not surprising, that strategy implementation or strategy execution did not make the top 10 list. For many years, strategic management, and particularly strategy formulation, has received robust examination in the literature (Chandler, 1962/1998, 1977; Mintzberg, 1994; Mintzberg, Ahlstrand, and Lampel, 1998, 2005; Porter, 2008, 1990, 1986, 1985, 1980; and Pryor, Anderson, Toombs & Humphreys, 2007). However, Beer and Eisenstat (2000: 29), suggest that efforts to extend strategic implementation paradigms fail to provide an integrated representation that would assist in the effective realignment of “structure, systems, leadership behavior, human resource policies, culture, values, and management processes.”

**THE USE OF EVIDENCE-BASED THEORY DEVELOPMENT**
From the discussion presented in this article, it is evident that various theories and approaches to theory development have their followers who may be heavily invested in the particular theories and approaches. There are detractors and critics as well. While this debate goes on in the literature, there are very real business developments that are happening in the new competitive landscape which we may be missing out on as we write these articles and they ultimately come to print two or three years from the initial concept. Following is an examination of a model and related theory that resulted from the approach we have chosen to pursue for organizational theory development. The term evidence-based is now being used in management and organizational literature (Pfeffer and Sutton, 2006; Rousseau, 2005), where it is defined as “a paradigm for making decisions that integrate the best available research with decision makers’ expertise and client/customer preferences to guide practice towards more desirable results” (Rousseau, 2005:258).

The evidence-based approach combines selected elements of other organization theory development approaches and allows researchers to reposition the legitimization process so that newly developed theories and models can be considered legitimate until they are challenged and proven otherwise through rigorous testing and/or implementation by practitioners. This allows newly developed theories and models to be proposed in a timely fashion so that they are more meaningful in terms of current organizational needs and their internal and external environments.

THE 5 P’S MODEL: AN EXAMPLE

This article analyzes the legitimacy and potential usefulness of the 5P’s Model which was designed as a comprehensive, strategic leadership and systems management model for strategy development and execution. In his book, The Case Study Handbook: How to Read, Discuss, and Write Persuasively about Cases, Ellet’s (2007) listed the 5P’s Model along with Vroom’s Expectancy Theory and Porter’s Value Chain Theory as “business concepts that are already part of your working knowledge or are taught in business courses” (p. 6).

The 5P’s Model was developed in response to specific needs relating to gaps in strategic management theory relating to (1) clarification of the elements of strategic management, (2) the horizontal and vertical alignment of the strategic elements, and (3) strategy execution or implementation. Various strategic management theories, models and approaches were considered (e.g., Chandler, 1962/1998, 1977; Mintzberg, 1994; Porter, 2008, 1990, 1986, 1985, 1980). Then gaps were noted in terms of implementation (Beer & Eisenstat, 2000; Pryor, Anderson, Toombs, & Humphreys, 2007) and alignment (Pryor, White & Toombs, 1998).

Elements of the 5P’s Model
The 5P’s Model can be used in the management and transformation of individuals, families, and organizations. The elements of the 5P’s Model (Author, et al, 1998, 2007) are discussed below and are depicted in Figure 1.

![Figure 1: The 5P’s Model](image)

**Purpose** is the strategic intention of individuals, families, organizations, Purpose includes: (1) Mission – Why does the person, family, or organization exist (2) Vision – What does the person, family, or organization want to be in the future? (3) Broad Goals and Objectives – In general, what do I/we want to accomplish? (4) Specific Goals and Objectives – What specific things do we individually (and/or as leaders of families, or organizations) want to achieve? And (5) Strategies and Tactics – How will we achieve our goals and objectives?

**Principles** are the core values that people individually (and as members of teams and families as well as leaders of organizations) care about passionately. These are positive shared values to which individuals and members of organizations commit, and these Principles are the basis for people’s behavior.

**People** are the individuals and members of teams who are the process owners. They make the decisions and carry out the actions required for success in their respective teams, families, and organizations. They are knowledgeable process owners because they are trained and cross trained in the knowledge and skills they need to function in their respective personal and professional lives. The individuals and members of teams are aligned through shared core values. Ethical leaders make a positive difference in the future and the history of the world. In strategic management models (including the 5P’s Model), the only active ingredient is the
People element. So, it is impossible to create and execute strategic and tactical plans unless the people in an organization are willing and able to do so.

Processes are the step-by-step methods for carrying out the strategies and tactics to achieve the mission, vision, goals and objectives. Every process must be identified, documented, and streamlined. Processes must be transparent so that others can see how (and why) decisions are made and actions are taken.

Performance includes measurements and results. Whatever we care passionately (e.g., ethics, integrity, safety, quality, customer satisfaction), then we must measure the extent to which we are successful in that area. Those measurements are called key performance indicators.

The 5 Ps Model was initially introduced as a theoretical concept. However as practitioners, researchers, and authors have become more aware of the 5 Ps model, it is being perceived as a legitimate, useful theory. For example, the 5 P’s Model was appropriately referred to as the 5P’s Model of Leadership by Ellet (2007) who discussed it and other concepts in The Case Study Handbook as follows: “This book provides a method of organizing and directing case study and guidance on how to communicate the results. The method should help you use the business concepts that are already part of your working knowledge or are taught in business courses—concepts such as: Expectancy Theory (Victor Vroom); 5Cs Analysis of Marketing Situations; 5Ps Model of Leadership (Mildred Golden Pryor, J. Christopher White, and Leslie A. Toombs); Macroeconomics; (and) Value Chain (Michael Porter). The combination of a method to organize thinking about a case and business concepts will help you come to conclusions and explain why you think they’re valid” (p. 6).

Additionally the 5P’s Model (Pryor, White, & Toombs, 1997, 2007) has now been successfully applied in many organizations. Yet these applications were an integral part of the every day operations of the companies. They were not the subject of rigorous tests of construct validity. From an organizational theory standpoint, organizational leaders need to understand and be able to apply theories relating to (1) the planning and execution of strategic and tactical actions; (2) the development, management, and improvement of processes; (3) the fiscal and financial control of their organizations; and (4) key performance indicators which indicate the extent to which their organizations are successful in achieving organizational and process goals. However, organizational success depends on the people who are involved in the application of theories and concepts. As organizational leaders implement various theories and models, it is they who must decide whether theories and models are valid and worthwhile.

Ellet’s (2007) reference to the 5P’s Model as the 5P’s Model of Leadership is appropriate because it is a strategic leadership model which leaders can use to “establish strategic implementation as a core competency for their respective organizations” (Author, et al, 2007: 3-17). In the article, Strategic Implementation as a Core Competency: The 5P’s Model, Pryor, Anderson, Toombs & Humphreys, 2007: 14) noted that a contribution of the article is “the assimilation of the implementation literature across numerous functional and academic disciplines (e.g., strategic management, organizational behavior, operations management, human
resources management, and organizational development).” They go on to say that “When it comes to guidance for effectively implementing organizational strategies, managers looking to the academic literature are often left wanting and confused, as the bulk of this writing is slanted toward strategy formulation” (Pryor, et al, 2007: 14).

While strategy formation can be viewed as a core competency, these authors propose that (strategic) implementation expertise and capability . . . is equally important . . . for creating and maintaining a sustainable competitive advantage” (Pryor, et al, 2007: 14). They suggest that a “need existed for a more aligned and integrated methodology of strategic execution” and to meet that need they offered “the 5P’s Model, a universal, comprehensive framework of strategy implementation” (Pryor, et al, 2007: 14). The 5P’s Model (also known in the literature as the 5P’s Strategic Leadership Model) is proposed in this article as a model worth acknowledging as legitimate and beneficial for academic theorists as well as practicing managers.

The originators of the 5P’s Model integrated existing theories relating to organization theory, strategic management, systems theory, process management and improvement, and leadership. Then using the evidence-based model for organization theory development, they extended existing theory and created the 5P’s Model for Strategic Leadership. This Model extends existing organization theory in that it enables organization leaders vertically and horizontally throughout the organization to align Purpose People, Principles, Processes and Performance to achieve increasingly higher levels of success. In addition, the 5P’s Model offers organization leaders the capability to better understand, and therefore be able to achieve, strategy implementation so that it becomes a core competency of the organization. Originally, the creators proposed the 5P’s Model along with accompanying theories. Then the 5P’s Model and related theories were applied by practitioners who found them to be useful in terms of understanding, managing, and improving their organizations. So, using the evidence-based theory of organization development, the originators of the 5P’s Model created a universal, comprehensive framework of strategy implementation that is useful in terms of aligning organization Purpose, People, Principles, Processes, and Performance.

**CONCLUDING THOUGHTS**

In this article we examined the history of theory development as we presented organization and management theories and models from the early 1800s until today. In addition, we presented differing opinions about problems within the field of organization theory with some theorists going as far as to call organization theory irrelevant. As we analyzed the need for rigorous testing in order for a theory to be considered legitimate, we considered debates among authors who call for a more rigid paradigm for organization theory and methodological rigor and those who respect theories and models that are presented as subjects for discussion and enhancement of the field of organization theory. We suggested that the evidence-based approach to organization theory development may be more appropriate in today’s dynamic environment of
rapid change. Finally, we provided an example of the 5P’s Model and related theories that were developed using the evidence-based approach to organization theory development.

New theories and models exist if we who are organizational theorists, researchers, professors, and practitioners are willing to consider them. Theory is not a synonym for fact. Theories do not have to be validated prior to their being presented as theories unless those in power choose for that to be a requirement. Theories and models can be presented for purposes of discussion as they were when the earlier theories and models of leadership, management, and organization were presented. Organization theory development can be achieved through various types of research including that which requires hypothesis testing or grounded theory. However, conceptual theory and model development and evidence-based development of organization theory are also legitimate and useful.

There will always be those who try to dictate requirements whether it is in the field of organization theory or in the leadership of nations. Fortunately, there will always be others who understand that real progress is made through the freedom to innovate, to propose theories and models to be considered in terms of worth and potential for application. Legitimacy denotes worth. We can only determine legitimacy if theories and models are published, and we are able to determine the extent to which they are meaningful to us and to our organizations. We suggest that more authors should do as Ellet (2007) did. He contemplated which business concepts and theories might be useful in case analysis and he suggested in *The Case Study Handbook* “The combination of a method to organize thinking about a case and business concepts will help you come to conclusions and explain why you think they’re valid” (p.6). Perhaps we researchers, authors, faculty members, and business practitioners should be able to contemplate and debate the usefulness of various theories and models without worrying so much about the relevance of the field of organization theory or the legitimacy of the theories and models when they are initially proposed. This can only occur if those in power in the various educational institutions, business organizations, professional organizations, and media outlets understand that the field is organization theory, not organization fact. So, it is under these circumstances that we offer this paper in order to generate a respectful debate about the introduction of new theories of management and organization.

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A MULTI-THEORETICAL APPROACH FOR ACHIEVING THE OPTIMAL BALANCE OF AN EXPLORATION-EXPLOITATION MINDSET

T. Brad Harris, Texas A&M University, tharris@mays.tamu.edu
Adam C. Stoverink, Texas A&M University

ABSTRACT
This paper offers a unique model that explains how organizations arrive at an optimal exploration/exploitation mindset by incorporating multiple organizational theories (transaction cost economics, institutional theory, and structural contingency theory). It is argued that environmental factors determine the optimal balance of exploration/exploitation and the forces created by TCE and institutional theory drive the organization closer to the optimal balance. However, bounded rationality, uncertainty, inertia, and institutional pressures also cause an organization to “overshoot” the optimal balance. Organizations, by way of double-loop learning and increased absorptive capacity, reduce these miscalculations over time and become more honed in on the optimal balance of exploration and exploitation.

INTRODUCTION

Generally speaking, strategic management has attributed differences in firm performance to a firm’s ability to develop sustained competitive advantages (De Carolis, 2003; Rouse & Dallenbach, 1999). In other words, organizations achieve success by doing something better than their competitors over a sustained amount of time. However, entrepreneurship attributes differences in firms’ performance to the identification of previously unexploited opportunities (Hitt et al, 2001). Despite these apparent differences, these two outlooks are not mutually exclusive, but rather complementary (Ireland et al, 2003). The field of strategic entrepreneurship argues that organizations must be able to identify new opportunities and develop sustained competitive advantages to achieve long-term success. That said, firms must balance the exploration of new opportunities and the exploitation of old certainties (Schumpeter, 1934; Holland, 1975; Kuran, 1988; March, 1991). The purpose of this paper is to use key organizational theories to examine how organizations develop the optimal balance between exploration and exploitation to achieve long-term success.

Consistent with previous research, this paper refers to exploitation as the refinement of an existing technology and exploration as the invention of a new technology (Winter, 1971; Levinthal & March, 1981; March, 1991). When an organization is focused on identifying new technologies (exploring), the speed at which existing technologies are improved is reduced. Conversely, when an organization is focused on improving existing technologies, the search for
new technologies is reduced (Levitt & March, 1988). Clearly, trade-offs have to be made in order to find the most appropriate balance of such activities.

In this paper, I refer to a firm’s focus on exploration vs. exploitation as its organizational mindset. The idea of an organizational “mindset” is not unique to this study. Ireland et al (2003), for instance, defined an organization’s entrepreneurial mindset as a perspective “through which individuals promote flexibility, creativity, continuous innovation, and renewal” (p.968). Similarly, in this study the organization’s mindset refers to the organization’s balance between exploration and exploitation. Specifically, I will analyze exploration and exploitation in the context of innovation, where an exploring mindset is more likely to pursue disruptive innovative activities and an exploiting mindset is more likely to pursue incremental innovations. Using transaction cost economics, institutional theory, structural contingency theory, and organizational learning, I propose a theoretical model explaining how successful organizations achieve the proper balance between an exploration and exploitation mindset. I begin with a brief discussion of the trade-offs associated with exploring vs. exploiting mindsets, an explanation of the different organizational theories used in this paper, followed by a proposal of a new model explaining how organizations find an optimal balance between exploring and exploiting. I conclude with a discussion of the proposed model’s contributions and implications.

Innovation and the Trade-offs of Exploring and Exploiting

Webster’s Dictionary (2009) defines innovation as “the introduction of something new.” Past research has identified two main types of innovation: sustaining (also called incremental) and disruptive (Christensen, 1997). The first type refers to innovations that improve existing processes (exploitation), whereas the second type refers to innovations that disrupt the marketplace and create an entirely new market class (exploration). While the scarcity of resources and the striking differences between an exploitation mindset vs. an exploration mindset may make finding a balance between the two types of innovation difficult (Gupta et al, 2006), one thing is clear: innovation is critical for firm success and survival (Ancona & Caldwell, 1987).

Incremental innovations, such as process improvements, can result in increased efficiency, lower costs, and increased customer satisfaction (Hammer & Stanton, 1999; Harry & Schroder, 2000), but these gains in productivity may limit an organization’s flexibility and ability to radically innovate (Abernathy, 1978; Benner & Tushman, 2003). Disruptive innovations, on the other hand, alter competition by creating new product classes and rendering old technologies obsolete (Tushman & Anderson, 1986; Danneels, 2004). Entrepreneurial actions that create disruptive innovations, however, arise from the opportunities found in uncertainty (Ireland et al, 2003). Thus, the entrepreneur, in this case the organization, bears the risk of the innovation. In addition to bearing the risk of a potentially unsuccessful innovation, established firms that introduce a disruptive change may “reset their clocks” and reintroduce their liability of newness (Amburgey et al, 1993). Accounting for the benefits and pitfalls of both types of innovations, it makes sense that the most successful firms have developed an ability to

Finding the appropriate balance between exploration and exploitation is the challenge this paper seeks to address. March (1991) argued that while both exploration and exploitation are necessary for success, the two are incompatible. First, exploration and exploitation compete for scarce organizational resources. If more resources are appropriated to exploration, fewer resources can be appropriated to exploitation, and vice versa. Second, explorative and exploitative actions are self-reinforcing. Exploration often leads to failure, which in turn leads to even more exploration, creating a “failure trap.” Exploitation, on the other hand, can generate early success and reinforce the need for additional exploitation, creating a “success trap” (Gupta et al, 2006). And finally, the mindsets needed for exploration and exploitation are inherently different. Exploitation thrives on commitment, narrowness, and cohesiveness, whereas exploration thrives on thoughtfulness, breadth, and openness (March, 1996). Further complicating the issue is the environment in which the organization operates. For instance, organizations that focus more on process improvements are likely to do well in stable environments (Donaldson, 1995; Hannan & Freeman, 1984), whereas turbulent environments may require more radically innovative capabilities (Teece et al, 1997; Tushman & Anderson, 1986). I will now discuss how transaction cost economics, institutional theory, and structural contingency theory work together to explain a firm’s balance between an explorative and exploitative mindset.

Transaction Cost Economics

Transaction costs are defined as the costs associated with the planning, adapting, executing, and monitoring of transactions (Williamson, 1983). In a seminal work, Coase (1937) suggested that firms emerge to take advantage of the costs of using the price mechanism, or market. Essentially, the transaction costs associated with negotiating, monitoring, and enforcing contracts between a firm and its employees are less than the costs associated with conducting all transactions in the market. Alchian and Demsetz (1972) further argued that firms are at an advantage over the market when team-oriented production increases productivity and it is feasible to estimate the marginal productivity by observing or specifying behavior. Oliver Williamson (1975, 1985) then introduced two assumptions key to explaining why transaction costs exists – bounded rationality and opportunism. The assumption of bounded rationality argues that people have limited cognitive ability to process all the information necessary to make perfect decisions. Opportunism refers to self-interest seeking with guile (Williamson, 1975). Both bounded rationality and opportunism, paired with variables like transaction frequency, uncertainty, and asset specificity, are sources of “friction,” or inefficiencies, that dictate whether a transaction is best-served for the market or hierarchy (firm). To summarize, transaction cost economics is concerned with the choice of the best governance structure in a given context. Governance structures that increase efficiency are more desirable than those that do not.
Central to this paper, however, is the role of the entrepreneur in transaction cost economics. As early as 1933, the entrepreneur was viewed as a risk-bearing economic functionary that integrates the divisions of labor in the face of uncertainty (Knight). When the assumption of bounded rationality is replaced with entrepreneurship, the role of the entrepreneur becomes even more evident (Jones, 1998). For example, Jones argues that Williamson’s use of bounded rationality in the face of uncertainty has a negative connotation, which implies that people (and firms) are defensive against uncertain environments. However, when using the term entrepreneurship instead of bounded rationality, firms arise to proactively take advantage of uncertain environments. According to Jones, “it is only the presence or existence of uncertainty that generates the need for entrepreneurial activity and unleashes the process of creative destruction and allows it to become a positive force in propelling firm and industry level innovation” (1998; p. 20).

Taken at first glance, one might assume that all firms arise with an exploration mindset – focused on disruptive innovation. This assumption, however, would imply that all firms begin with a radical new product. This implication is both shortsighted and incorrect. Take, for example, the number of cellular phone service providers that exist in today’s market. Clearly, these firms are not offering a radically new product or service, but rather each believes they can offer the same (or at least similar) product or service more efficiently. Firms can emerge, then, with either an exploitation or exploration mindset. In either situation, however, the firm will search for the most efficient governance structure in an effort to reduce transaction cost. As firms reorganize their governance structures to achieve maximum efficiency, it makes sense to argue that their mindset will shift to the optimal balance between exploitation and exploration (see figure 1).

Two major contextual variables, the environment and asset specificity, also support this argument. In this section I will focus on asset specificity (I will discuss the environment later in the paper). Asset specificity is defined here as the extent to which assets are more valuable to one user than they are to the next-best user (Klein, Crawford, & Alchian, 1978), or in other words, asset specificity refers to an asset’s non-redeployability (Williamson, 2002). Asset specificity works in two ways. First, as asset specificity increases, uncertainty and risk also increase. Second, as asset specificity decreases, uncertainty decreases along with the advantage of conducting transactions within the firm.

Using the entrepreneurial approach described by Jones (1998), an increase in uncertainty provides an opportunity to create value. However, the coinciding increase in risk discourages a firm from maintaining an entirely exploratory mindset. This can be plausibly supported by statistics that indicate 20% of new entrepreneurial firms fail within one year, and 66% fail within 6 years (Timmons, 1994). It can be argued that firms relying on disruptive innovation (and high asset specificity) were unable to develop enough of an exploitation-orientation mindset to
FIGURE 1

capitalize on reduced transaction costs. Therefore, the exploration-oriented firms that did survive the first few years most likely were able to develop a more exploitation-oriented mindset to achieve a more optimal balance of exploration and exploitation activities. On the other hand, for entrepreneurial firms relying on incremental innovation (low asset specificity), the margin for error is smaller. Their assets could be re-deployed at very high salvage rates, meaning that some sort of disruptive innovation would most likely be required to increase asset specificity and the chances for long-term survival. It is important to note that this paper argues an exploration-exploitation continuum, so it is possible for some innovations to be more disruptive or more incremental than others. For example, an exploitation-minded organization may shift towards more exploration, but their level of exploration may be notably less than another exploration-minded organization.

The present model (figure 1), which accounts only for a transaction cost perspective, seems to indicate that firms will shift their organizational mindset (by way of changing their governance structure) until maximum efficiency, or the optimal mindset, is reached. If this were the case, however, it would be impossible to explain why so many firms fail. Firms would simply adjust their mindset until efficiency gains ceased. However, the same factors providing the opportunity for entrepreneurship – bounded rationality, asset specificity, uncertainty, risk, opportunism, etc. – are the same factors that make transaction costs difficult to measure (Barzel,
1997). For instance, even if all information were available, an individual’s cognitive limitations (i.e.: bounded rationality) may make it impossible for him/her to properly value a transaction. In the words of Alchian and Woodward (1988), “people don’t know everything and so they make mistakes.” These mistakes make identifying the most efficient governance structure an inexact science. Further, there can also be major difficulties associated with changing a governance structure. For example, Demsetz (1988) argues that a firm is a “bundle of commitments to technology, personnel, and methods, all contained and constrained by an insulating layer of information that is specific to the firm, and this bundle cannot be altered or imitated easily or quickly” (p. 165). Additionally, North (1990, 2005) suggests that an organization’s decision to change may be constrained by path-dependent processes, or said differently, a firm’s prior choices may shape their future choices. The problems in measuring transaction costs and changing governance structures named above are but a small number of the factors that may cause an organization to “overshoot” the optimal balance between an exploration and exploitation mindset. In the present paragraph, the reasons for a firm failing to achieve an optimal mindset are unintentional. In the following section, however, I introduce institutional theory to illustrate why firms may intentionally pursue activities that drive their organizational mindset away from the optimal balance between exploration and exploitation.

**Institutional Theory**

Instead of focusing solely on efficiency, institutional theory highlights survival driven attributes such as legitimacy, stability, and access to resources. Institutional theory asserts that the institutional environment has a powerful impact on the development of organizational structures, perhaps even greater than market factors (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Meyer and Rowan (1977), for example, state that institutional myths are accepted ceremoniously in order to gain legitimacy. Over time, these “myths” become near-concrete rules (Zucker, 1987). These rules become so strong that institutional pressures, through a process called “isomorphism,” increase the homogeneity of organizations (DiMaggio & Powell, 1983). Isomorphism results because the penalties associated with breaking institutional rules are greater in magnitude than the inefficiencies that arise from following them. For the purposes of this paper, institutional theory offers a reasonable explanation for why organizations engage in inefficient activities. To be fair, though, there are cases when following the institutional rules has a positive indirect impact on efficiency (i.e.: greater legitimacy provides greater access to resources). After all, it is presumed that institutional norms and rules are dictated largely by the most influential (and perhaps successful) firms. In the case of the proposed model, institutional theory has two notable impacts. First, institutional theory, like transaction cost economics, may guide an organization towards a more optimal exploration/exploitation mindset. Second, and perhaps most importantly, institutional theory provides an explanation of why firms intentionally “overshoot” or “undershoot” the optimal mindset (see figure 2).
The case of total quality management (TQM) provides a useful example of how institutional pressures can have both a positive and negative impact on a firm’s achievement of an optimal exploration/exploitation mindset. First, TQM techniques focus on process improvements that allow a firm to exploit their current technologies. In the case of a firm with an exploration-oriented mindset (see Firm A at time = 0 in the model), the deployment of TQM would shift the organizational mindset towards an optimal balance. If firm A, however, had already been in existence for several years and was already near the optimal balance, the choice to use TQM techniques may increase costs and yield insignificant or negative returns, thus causing an “overshooting” of the optimal balance. However, in the case of a firm that began as process-focused, or exploitation-minded, the use of TQM may cause a shift away from the optimal balance when considering just efficiency, but may have positive indirect effects. Staw (2000), for example, found that TQM did relatively little to improve performance, but did improve firm admiration and perceived innovativeness. Firm admiration and perceived innovativeness, in turn, may result in the ability to partner with an innovative firm, which could conceivably shift a firm’s mindset towards exploration through increased absorptive capacity, the attraction of innovative human capital, and increased organizational learning.

As mentioned in the above paragraph, the indirect effects of adopting institutional norms can shift an organization’s mindset towards an optimal exploration/exploitation balance or, conversely, shift it farther away from an optimal balance. Past research has demonstrated two perspectives: Institutional norms can stifle innovation (Burgelman, 1984; Kanter, 1986; Lawrence & Dyer, 1982) or ignite it (Davis & North, 1970). If an organization is too
exploitation-oriented and is coerced to adopt an exploitation-oriented structure, the end result may be negative. DiMaggio and Powell, borrowing from Weber (1952), refer to such a situation as an “iron-cage.” On the other hand, if an organization is too exploration-oriented, and is coerced to adopt a more exploitation-oriented structure, the end result may be positive in that the organization achieves a more optimal balance between exploration and exploitation. Over time, however, such a firm is likely only forging a new “iron-cage.”

Further compounding the reasons why an organization may overshoot the optimal balance between exploration and exploitation is the idea of organizational inertia. Organizational inertia is defined as the rate at which an organization can change in comparison to the rate at which its environment is changing. Organizations with high inertia, then, are organizations that cannot change as fast as their environment (Hannan & Freeman, 1984). Inertia can be seen in the examples of “failure traps” and “success traps” mentioned earlier in the paper. Once organizations are content that they are doing things well, they may see very little incentive to look for or adopt new techniques (Robertson & Langlois, 1994), creating inertia. In the context of my proposed model, Firm A starts as an exploration-minded organization but realizes the need to become more exploitation-minded (either through a desire to increase efficiency or because of institutional pressures). As Firm A begins to see the benefits of becoming more exploitation-minded, it will continue to pursue such activities up to and beyond the optimal balance of exploration and exploitation because of inertia. In addition to causing a firm to overshoot the optimal balance of exploration and exploitation, organizational inertia can have fatal consequences. In the next section I use structural contingency theory to introduce the environment and discuss what cues may trigger an organization to re-correct their exploration/exploitation mindset.

Structural Contingency Theory

The basis for structural contingency theory can be found in the works of Thompson (1967) and Lawrence and Lorsch (1968). Pfeffer (1982) summarizes the principal tenets by stating that organizations must be sure to match their internal structures with their external environments (Pfeffer, 1982). While transaction cost economics and institutional theory are both concerned with an organization’s structure and both lightly touch on environmental factors (i.e.: uncertainty, institutional environment, etc.), structural contingency theory puts an even greater emphasis on the environment as a determinant of a given structure’s success. This provides two very important components to my model. First, environmental factors will determine the optimal balance of exploration and exploitation. Second, the environment will provide “triggers” that indicate when an organization needs to adjust its mindset.

Up to this point, I have largely ignored the environment’s effect on the optimal balance between exploration and exploitation by assuming an arbitrary optimal balance lying somewhere between the exploration and exploitation continuum. In this section, I remain consistent with previous research to argue that the organization’s environment, and particularly the stability and
uncertainty present in the environment, will determine where the optimal balance of exploration and exploitation lies. Pennings (1992), adding on past work by Burns and Stalker (1961), argues that firms in highly dynamic and uncertain environments should adopt more organic structures. In stable environments, however, mechanistic structures are more appropriate (similar arguments are made by Lawrence & Lorsch, 1967; Perrow, 1967; Woodward, 1965). Organic structures are characterized by low levels of standardization and decentralized decision-making, allowing firms to process large amounts of information more efficiently than mechanistic structures. Mechanistic structures, on the other hand, offer the organization more centralized control. Covin and Slevin (1988) found empirical support for the notion that organic structures are more conducive to radical innovation (exploration-minded), while mechanistic structures have a negative relationship with radical innovation. Given these findings, I argue that in highly uncertain environments, the optimal balance between exploration and exploitation will be closer to the exploration pole of the continuum. However, in stable environments, the optimal balance will be closer to the exploitation pole of the continuum (see figure 3).

FIGURE 3

To this point, I have made four key arguments: First, in order to achieve long-term success, organizations must find a balance of an exploration- and exploitation-mindset. Second, organizations emerging as highly exploration-minded will become more exploitation-minded in an effort to increase efficiency or comply with institutional forces (similarly, highly exploitation-minded organizations will become more exploration-minded). Firms that do not adjust will risk failure. Third, organizations will struggle to find the optimal balance between an exploration and
exploitation mindset because of factors such as uncertainty, bounded rationality, institutional pressures, and organizational inertia. And finally, I have argued that an organization’s environment will determine the most appropriate structure, and the match between structure and environment will determine the optimal balance between exploration and exploitation. These arguments, however, do not answer the central question of how some firms arrive at an optimal balance and achieve long-term success, while others do not. Using Miller’s (1993) contingency factors and organizational learning, I will now illustrate how firms achieve the optimal mindset of exploration and exploitation.

Miller (1993) describes the “simplicity” phenomenon, which is closely related to inertia and further supports my argument that firms may “overshoot” the optimal balance between exploration and exploitation. Simplicity refers to the tendency of an organization’s focus to become narrower as a result of neglecting all activities outside of the organization’s strengths. Inertia implies that an organization fails because it loses its “edge,” while simplicity argues that organizations fail because their “edge” becomes too sharp. However, significant changes in the environment (e.g., a severe recession, new competitors, etc.) and/or the internal structures (e.g., a change in top management) can broaden managers’ horizons (Miller, 1993; Levitt & March, 1988; Tushman & Anderson, 1986). When these environmental shocks occur, there is evidence to suggest that organizations will undergo periods of “quantum” or “revolutionary” change (Miller, 1982). Using Miller’s arguments, I posit that organizations will forego costly incremental structural changes until a radical structural change is required. In the proposed model, these periods of quantum structural change, triggered by environmental factors, will cause a shift from exploration-mindedness to exploitation-mindedness, or vice versa (see figure 4). Firms failing to make such a change will fall victim to the fatal symptoms of simplicity and inertia.

**FIGURE 4**
In addition to making quantum structural changes during “shock” periods, I also argue that factors such as absorptive capacity (Cohen & Levinthal, 1990) and organizational learning (March, 1991; Argyris & Schon, 1978) will help organizations achieve the optimal balance of exploration and exploitation. Absorptive capacity would argue that a firm’s ability to recognize, assimilate, and apply new external information will be related to its prior knowledge. Organizational learning, and in particular double-loop learning, requires that firms periodically reassess standards to ensure relevance. Combined, the positive effects of increased absorptive capacity and organizational learning will reduce the amount of “overshoot” in an organization’s mindset and initiate more reassessment of the environment. Using a decaying sinusoid function, I model these effects (see figure 4) to illustrate how an organization will “hone in” on the optimal balance of an exploration and exploitation mindset over time. In the proposed model, organizations are always changing their mindset to increase efficiency and/or relieve institutional pressures. However, over time successful organizations reap the positive benefits of absorptive capacity and organizational learning. These benefits, I argue, help an organization to reduce inefficient behaviors and arrive at an optimal balance between exploration and exploitation.

Discussion

This paper proposes a theoretical model that explains how successful organizations achieve the proper balance between an exploration and exploitation mindset. Using transaction cost economics, I argue that entrepreneurial firms search for the most efficient structure available. This search for efficiency will naturally draw the organization closer to the optimal exploration/exploitation mindset. However, because of environmental uncertainty and limited
cognitive ability (bounded rationality), achieving the optimal balance is rarely achieved. Further complicating matters are institutional pressures and organizational inertia. In some cases, institutional pressures may lead an organization away from the most optimally-balanced structures. Additionally, organizational inertia and simplicity may result in an organization’s inability to change its structure or failure to recognize changes in the environment, leading to an “overshooting” of the optimal balance between exploration and exploitation. Using absorptive capacity and organizational learning benefits, however, firms will be able to achieve more optimally-balanced mindsets over time.

The implications of this paper are two-fold. First the proposed model integrates multiple organizational theories to provide an explanation of why firms struggle to find the optimal structure. Transaction-cost economics and structural contingency theory have traditionally focused on efficiency, while institutional theory has been more focused on survival. In this paper, these sometimes conflicting views are used in harmony to provide a more realistic and robust perspective of an organization’s structure choice.

Second, this paper integrates absorptive capacity and organizational learning to illustrate how firms arrive at an optimal balance of exploration and exploitation. Cohen and Levinthal (1990) have previously argued that absorptive capacity can increase innovative capabilities. Similarly, organizational learning has generally been thought to improve firm performance (Levitt & March, 1988). However, very little, if any, work has simultaneously viewed these topics in the context of transaction cost economics, institutional theory, and structural contingency theory.

While the proposed model offers valuable insight by explaining how firms achieve an optimal mindset over time (and why so many firms fail), there are many potentially fruitful opportunities for future research. For example, what impact do individual differences play in an organization’s structure choice? In a meta-analysis by Zhao and Siebert (2006), it was reported that entrepreneurs scored significantly different than non-entrepreneurs on 4 out of 5 personality dimensions. In addition to personality differences, popular research also suggests that the risk propensity of entrepreneurs is greater than traditional managers (Stewart & Roth, 2001) and entrepreneurs are more optimistic than administrators in their assessment of potential opportunities (Cooper, Woo, & Dunkelberg, 1988; Palich & Bagby, 1985). If leaders are indeed making structural decisions, the field of organizational theory may benefit from analyzing leadership contingency theories in addition to the traditional structural contingency theory. Further, the model assumes a static environment with unchanging levels of uncertainty over time. Future researchers are encourage to examine the effect of dynamic environments on structure choices as well as the impact of influential organizations’ structure choices on the environment (i.e.: creating new institutional pressures). By pursuing such avenues, the proposed model could be made more robust and offer even more explanatory power.

In conclusion, this paper offers a unique model by incorporating multiple organizational theories to explain how organizations achieve an optimal exploration-exploitation mindset. It is
argued that environmental factors determine the optimal balance, while the forces from TCE and institutional theory will drive an organization closer to the optimal balance. However, bounded rationality, uncertainty, inertia, and institutional pressures also cause an organization to “overshoot” the optimal balance. Organizations, by way of double-loop learning and increased absorptive capacity, reduce these miscalculations over time and become more honed in on the optimal balance of exploration and exploitation.

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TECHNOLOGY INTEGRATION IN A POST-M&A COMPANY

Deanna House, University of Texas at Arlington, deanna.house@mavs.uta.edu

ABSTRACT

The integration of technology after an acquisition can be further complicated when multiple countries are involved. Additionally, trust is an important factor amongst team members. This paper proposes a research model and predicts that trust will have an effect on the post-acquisition performance of an organization.

INTRODUCTION

Mergers and acquisitions are a common occurrence amongst multi-national corporations. This is particularly evident with the state of the current economic times. Businesses are streamlining and reorganizing in order to continue to make a profit. By choosing to acquire a company with appropriate resources, a firm can grow quickly with immediate access to markets, finance, technology, etc… (Lee, 2003)

McEvily et al 2004 define an acquisition as “a process by which firms develop new scientific and technological competencies, and renew old ones”. It is the “assimilation or absorption of technological knowledge from other organizations or public sources and the creation of technological competence through search, experimentation and other learning processes” (pg. 214). During 2005, there was a 35 percent increase in global acquisitions from the previous year (Benet & Goldberg, 2007). Although merger & acquisition activity has slowed down considerably in more recent times, some companies that were unable to get financing are able to now (McCracken & Cimilluca, 2009). This could have a drastic effect on acquisitions, regardless of the state of the economy.

Acquisitions that are strategic in nature can give companies the opportunity to expand core competencies. Global acquisitions have gained momentum and companies may need to acquire in order to keep up with the competition (Benet & Goldberg, 2007).

Sometimes a company may choose to form a strategic alliance with another company rather than acquire said company. There are, however, a number of potential risks that can occur. According to Hussey & Hall (2008), global risks should be monitored throughout the partnership. Risks such as loss of intellectual property, loss of internal knowledge or innovation,
loss of quality, possibility of security breach, and language and/or cultural barriers all must be addressed. A great deal of resources (both financial and managerial) are required in order for a company to maintain long term success from a foreign investment (Agarwal & Ramaswami, 1992).

This paper seeks to glimpse at the aftermath of an acquisition specific to information technology departments. What happens after the dust settles? The next section describes existing and relevant literature, followed by a proposed model, research contributions, and lastly future research.

**LITERATURE REVIEW**

The integration of technology is imperative to the success of an acquisition. Integration management is an important yet difficult factor of an acquisition (Bannert & Tschirky 2004; Kitching, 1967; Haspeslagh & Jemison 1991). Post-acquisition integration of technology and how employees are affected must be addressed by the integration team (Huang & Chuang, 2007). Employees have knowledge, and the integration of that knowledge is imperative for a company to remain competitive (Steinheider & Menold, 2004, Turner, 2000).

The added complexity of the integration of a global acquisition – multiple locations from multiple countries – places further stress on the performance of the firm. Incorporating employees and human issues in the integration strategy is pertinent to post-acquisition success. Huang & Chuang (2007) found that post-integration peer influence and superior’s influence had a significant effect on an employee’s behavior. How employees behave after an acquisition depends on a number of factors. When working conditions are good, employees are more involved (Nikandrou & Papalexandris, 2008).

Seggie & Griffith (2008) predict that firms that match key resources as global expansion occurs will be able to maintain value within the specific segment across the global market. Bernardin & Russell (1998) also found that skilled individuals must be attracted and retained in order for a firm to uphold its competitive advantage. As more and more companies are expanding globally, companies will have to expand and integrate quickly to survive (Ashkenas, et al., 2002).

Confidence, trust, and reputation are key factors necessary for the successful growth of the economy(Cofta, 2007). Trust plays a key role in an acquisition. It is important for trust to remain post-acquisition. When betrayal of trust occurs, the resulting response it to shut down and avoid taking risks (Reina & Reina, 2006). Typically, in the beginning stages of a relationship, only small risks are taken until trust can be established. Mutual trust is something that must be present in order to gain the support of employees during a significant change (such as an acquisition) (Shaw, 1997).

Knowledge integration can give an acquiring firm a competitive advantage. This integration of knowledge must be effective and efficient while also preventing employee turnover of the target firm (Lemieux & Banks, 2007). The key to integration of information technology is ensuring that both parties involved have access to each other’s critical data (Lees, 2003).
A firm can achieve superior resource-produced value when competencies are distinctive and relative sustained competitive advantage is present (Seggie & Griffith, 2008; Day, 1994; Grewal & Tansuhaj, 2001; Hunt, 2000). Technologies, in particular, can position both companies so that strengths are complemented. In the current economy, companies that have available funds to acquire new technologies and/or expand globally are in a great position to make good of the bad (Higgins, 2008).

If the acquired or target firm have strong resources, the post-acquisition performance and reorganization will be the best (Seth, 1990; Capron et al, 1998; Anand et al, 2005). Much of the success hinges on being able to choose the right type of company. A firm typically makes the decision to acquire another firm based upon complementing its existing competencies.

The model and propositions are listed in the sections below.

**MODEL**

![MODEL Diagram]

**PROPOSITIONS**

Companies have many different configurations of resources and said resources are difficult to transfer between firms (Andersén, 2007). What happens to the technology does not always come to mind.

Integration of IT on a global scale can involve simple tasks such as classification of contributing global applications to more difficult tasks such as implementing a global corporate standard/strategy (Ives & Jarvenpaa, 1991). The first proposition is below.

**P1**: As post-acquisition technology integration increases, post-acquisition performance of the organization will increase.

Honesty is something that goes along with trust. Giving timely, truthful, and appropriate information are all important characteristics of honesty and the formation of trust (Nooteboom, 2003). Once there is an existing interaction with a person, trust can begin to be formed. The second proposition is listed below.
**P2:** Trust amongst the post-acquisition team will further increase the post-acquisition performance of the organization.

### INTEGRATION OF THEORY

Resource-advantage theory helps explain how a firm remains competitive among a wide range of customers. According to the seminal article by Hunt & Morgan (1995), resource-advantage theory of competition is representative of a firm’s difficulty in maintaining the industry resource that has the competitive advantage which results in it having superior firm performance. Competitors seek to bypass or mitigate the superior firm by substitution, acquisition, imitation, or innovation; thus making the theory dynamic in nature. A firm’s performance can be improved by an acquisition; particularly if the integration is successful.

According to Barney (1991), firms that have rare resources among their competition are more likely to have a comparative advantage. Comparative advantage looks at superior value and low costs; which can transfer into competitive advantage. Organizations that are involved in a global acquisition have access to a better selection of resources; thus allowing for a more concentrated focus.

Henderson & Venkatraman’s (1999) Strategic Alignment Model focuses on the strategic fit of IT and business strategy and how both internal and external domain positioning can be integrated to achieve the best linkage between strategies. The integration of technology is something that mustn’t be forgotten. As mentioned above, the acquisition of resources that will fit well within the organization cannot be overlooked.

### PLAN FOR EXECUTION OF THE STUDY

Preliminary data will be collected using semi-structured interviews involving individuals that have personally been involved in an acquisition and the post-acquisition integration of the information technology department. This will give the author the ability to narrow-down the focus of the research.

The research will be qualitative and quantitative in nature. After the interviews are conducted, a questionnaire will be sent out to the individuals to distribute to team members. By gathering data from team members that also participated in the post-acquisition integration, the author will be targeting actual results (not just a high-level overview from an individual).

### CONTRIBUTIONS TO EXISTING LITERATURE

The integration of two global companies after an acquisition is something that research has been conducted on for over a decade. However, it is difficult to find specific research regarding integration. This information is relevant to business today and will assist managers and companies that are in similar situations with a global integration.
Very little research has been performed on the integration of information technology post-acquisition for global companies. There are additional, important implications that must be addressed that are specific to the information technology personnel: cultural barriers, trust, and integration success. Companies that are aware of the issues can further improve performance and jump ahead of the competition.

FUTURE RESEARCH

There are a few areas of interest that were not within the scope of this paper but would be excellent starting points for future research. As mentioned above, trust is imperative for a successful integration post-acquisition. Pre-acquisition a company will typically conduct research about how the two companies will potentially merge. An area of interest would be acquisitions that individuals had prior information about and how that affected the post-acquisition behavior. Harwood & Ashleigh (2005) found that when employees that had confidential information regarding a post-acquisition integration, high levels of tension were present amongst those that were participating on the integration team. Additionally, the use of a confidentiality agreement to limit the lines of communication seemed successful in preventing distrust from spreading organizational-wide. Harwood (2006) found that those that had signed a confidentiality agreement felt included and a feeling of belonging.

Another area of interest is the handling of technologies in terms of an alliance. Trust plays a key role in the formation of an alliance (Nooteboom, 1999). It would be interesting to look at the technological integration that is necessary when an alliance is formed.

CONCLUSION

This paper is a preliminary version of research to be conducted. The area of post-acquisition technology integration is one that has not been heavily researched. Information technology departments are an often overlooked area of an acquisition. This research can help to better prepare firms and alleviate some of the issues that are associated with global acquisitions.

REFERENCES


REWARDED FOR GOOD BEHAVIOR: AN EXAMINATION OF GOVERNANCE’S IMPACT ON THE RESTRUCTURING-PERFORMANCE RELATIONSHIP

Luke H. Cashen, Nicholls State University, luke.cashen@nicholls.edu

ABSTRACT

This paper empirically examines governance’s impact on the portfolio restructuring-performance relationship. It is argued that symbolic actions such as socially valid governance structures play a role in the social construction of firm performance when firms have engaged in portfolio restructuring activities. The paper discusses what constitutes good governance as set forth by practitioners and academicians and suggests that such assessments become salient in times of uncertainty and questionable performance, as is often seen with portfolio restructuring initiatives. Results suggest that firms are rewarded when their governance structures reflect socially valid indicators of sound governance – independent boards and non-duality structures.

INTRODUCTION

Portfolio restructuring has been a significant area of interest to strategy and finance scholars in helping to understand the limits of firm growth, the implications of changes in the firm’s business portfolio, as well as the effectiveness of changes in organizational and capital structures (Bergh, 2001; Bowman & Singh, 1993; Johnson, 1996). Although a considerable amount of restructuring research has been carried out resulting in much insight for scholars and practitioners alike, significant contributions can still be made (Bergh & Lawless, 1998; Bowman & Singh, 1993; Bowman, Singh, Useem & Bhadury, 1999; Chatterjee, Harrison & Bergh, 2003; Johnson, 1996; Markides & Singh, 1997). Specifically, portfolio restructuring involves the process of divesting and acquiring businesses that entails a refocusing on the organization’s core business(es), resulting in a change of the diversity of a firm’s portfolio of businesses (Bergh, 1998; Bowman, & Singh, 1990; 1993; Bowman et al., 1999; Gibbs, 1993).

A multitude of empirical and theoretical investigations into the antecedents of portfolio restructuring have revealed that various factors precipitate the shedding and/or expansion of corporate assets. A synthesis of this research reveals that the premier explanation (also known as the agency explanation) is that firms engage in portfolio restructuring as a direct response to less than desirable organizational performance (Duhaime & Grant, 1984; Hoskisson & Hitt, 1994; Hoskisson, Johnson & Moesel, 1994; Johnson, 1996; Johnson, Hoskisson & Hitt, 1993; Markides, 1995; Smart & Hitt, 1994), which is claimed to have resulted from past managerial inefficiencies. Such managerial inefficiencies occurred largely as a result of weak governance
mechanisms, and, as a result of its overwhelming acceptance by restructuring researchers, the agency explanation has made portfolio restructuring synonymous with weak or poor governance (Bethel & Liebeskind, 1993; Chatterjee et al., 2003; Hoskisson & Turk, 1990; Markides & Singh, 1997).

Although poor performance driven by weak governance is the most widely investigated antecedent of portfolio restructuring, it is also the most widely contested area since the governance structures of restructuring firms are automatically labeled as inappropriate. Research has not really proven that governance is weak in the pre-restructuring period, yet this school of thought has become institutionalized in the literature. Markides and Singh (1997) attempted to address this issue in their research and revealed that the governance structures of firms that did restructure are not statistically different from the governance structures of firms that did not restructure. As such, much work remains in this area in order to assess the relationship between governance and restructuring.

As prior research suggests, the ultimate goal of restructuring firms is to adjust an organization’s portfolio of businesses with the intent, either directly or indirectly, of improving firm performance. This paper attempts to address this issue by investigating the impact of post-restructuring governance and governance changes on firm performance. Utilizing institutional theory to address this topic is valuable since a firm’s financial performance may reflect social benefits resulting from symbolic actions that reduce uncertainty about managerial motives (Westphal & Zajac, 1998). Institutional theorists have argued that symbolic actions are most effective under conditions of uncertainty or ambiguity (DiMaggio & Powell, 1983; Heugens & Lander, 2009; Meyer & Rowan, 1977; Scott, 1995; Westphal & Zajac, 1998). The restructuring literature suggests that assets restructuring events are significant enough to surround the firm with uncertainty and ambiguity as a result of considerable changes to the firm’s routines and organizational domain.

Thus, one could argue that potentially symbolic actions such as socially valid governance structures might play a role in the social construction of a firm’s financial performance when engaging in portfolio restructuring activities. As such, it is suggested that the returns to shareholders are greater for those organizations exhibiting socially legitimated governance structures. As such, the research question of this paper is “What is the moderating impact of governance on the restructuring-performance relationship?”
LITERATURE REVIEW

The agency explanation of restructuring

The premier explanation as to why organizations engage in portfolio restructuring is in response to substandard organizational performance, which is driven by managerial inefficiencies (i.e., excessive levels of diversification, improper diversification, sub-optimal investments in R&D, unprofitable capital investments, and/or over-leveraging) that, in turn, resulted from weak governance. An organization divests assets with the intent of improving performance, whether it is their performance in relation to competitors, the overall industry, or a predetermined aspiration level. In fact, research has clearly demonstrated that firms engaged in restructuring often are performing poorly prior to the initiation of restructuring activities (Bergh, 2001; Bowman et al., 1999; Hoskisson & Hitt, 1994; Hoskisson et al., 1994; Johnson, 1996; Markides & Singh, 1997; Smart & Hitt, 1994). For example, Jain (1985) found that performance began to suffer approximately a year prior to divestiture and resulted in negative excess stock return of 10.8% within the one year prior to the actual restructuring event.

Proponents of the agency explanation suggest that managerial inefficiencies arise as a result of agency costs. Arguments are made that the board of directors, ownership concentration, and managerial incentives were ineffective and resulted in the failure of internal governance systems (Bethel & Liebeskind, 1993; Chatterjee & Harrison, 2001; Hoskisson et al., 1994; Jensen, 1993; Johnson, 1996; Johnson et al., 1993). Although never truly defined in the literature, weak governance is believed to be characterized by diffusion of shareholdings among outside owners, board passivity, and certain characteristics of managers and boards, such as minimal equity ownership by top managers and board members or an insufficient amount of outsiders sitting on the board (Bethel & Liebeskind, 1993; Dalton, Daily, Certo & Roengpitya, 2003; Johnson et al., 1993; Johnson, 1996; Westphal & Fredrickson, 2001).

Due to its overwhelming acceptance by restructuring researchers and its simplistic and intuitive appeal, the agency explanation has made portfolio restructuring synonymous with weak governance (Bethel & Liebeskind, 1993; Hoskisson & Turk, 1990; Markides & Singh, 1997). Smart and Hitt echoed this sentiment by suggesting that “many of the arguments and concepts embedded in the agency literature seem so compelling that agency and governance related arguments have become a virtual de facto explanation for many types of corporate restructuring” (1996: 1). As a result, the academic and practitioner literatures on portfolio restructuring have devoted much effort to pointing out such alleged governance failures and highlighting ways of improving the corporate governance system of the modern corporation (Jensen, 1993).

The institutionalization of agency arguments in the governance literature
There is unequivocal consensus that the dominant theoretical perspective employed to investigate governance in general in a host of disciplines is agency theory (Daily, Dalton & Rajagopolan, 2003; Dalton et al., 2003; Hillman & Dalziel, 2003; Jensen, 1998; Lynall, Golden & Hillman, 2003; Shleifer & Vishny, 1997). The central premise of this theory is that managers, as agents, can engage in decision making and behaviors that may be inconsistent with maximizing shareholder wealth (Berle & Means, 1932; Fama & Jensen, 1983; Jensen & Meckling, 1976).

It is important to note that agency explanations have become so ingrained in governance research that alternative paradigms are often ignored. Daily et al. referred to this barrier as empirical dogmatism, which they argued has negatively impacted researchers’ willingness to “embrace research that contradicts dominant governance models and theories (e.g., a preference for independent governance structures) or research that is critical of past research methodologies or findings” (2003: 379).

In essence, agency arguments have become the norm for viewing governance, and, as such, impact the organization of firms (e.g., the structure of the board). The agency arguments are embedded in how practitioners, institutional investors, and for the most part, academicians define what is good or sound corporate governance. In other words, there is remarkable consensus as to the best practices that need to reside in all firms if they are to maximize performance. Support for this idea was offered by Westphal and Zajac (1998) and Zajac and Westphal, who noted that “large investors appear to have co-opted normative agency theory to help legitimate their political agenda, thus contributing to and benefiting from the growth of agency theory as a dominant perspective on corporate control” (1995: 287-288).

**Defining good governance**

A major area of academic study within the governance literature is the investigation as to what constitutes good governance. As a result of the institutionalization of agency arguments, the literature has reached considerable agreement that the proper internal mechanisms of a firm include effectively structured boards; separating the position of board chair and CEO; executive and board compensation contracts that encourage a shareholder orientation; and concentrated ownership holdings that lead to active monitoring of executives (Brown, 2003; Chatterjee & Harrison, 2001; Daily et al., 2003; Dalton, Daily, Johnson & Ellstrand, 1999; Johnson et al., 1993). In essence, the social validity of these pressures and desired outcomes are largely unquestioned because they have been taken for granted. In other words, within the academic literature, popular press, and corporate practice, there is an extremely clear understanding as to what constitutes good governance. In fact, these conceptions are so ingrained in the minds of
academicians, shareholder activists, large shareholders, and institutional shareholders that the validity of these conceptions goes unquestioned even in spite of contradictory evidence.

It is obvious that agency theory principles, as elaborated in the academic literature, have also dominated corporate practice (Daily et al., 2003; Shleifer & Vishny, 1997). Evidence of this can be found by considering the reforms sought by shareholder activists, thus lending insight into those governance practices that are perceived as both legitimate and effective in protecting shareholders’ interests (Ryan & Schneider, 2002). According to Daily et al., shareholder activism is “designed to encourage executives and directors to adopt practices that insulate shareholders from managerial self-interest by providing incentives for executives to manage firms in shareholders’ long-term interests” (2003: 373). It is argued in the literature that such activism acts as a trigger to destabilize managerial power and makes managers more responsive to the needs of institutional investors through increased monitoring by owners and boards of directors (David, Hitt & Gimeno, 2001). As noted by David et al., “through activism, managers are pressured to take actions to signal their commitment to owners” (2001: 146). Specifically, corporate governance reforms have included configuring boards largely, if not exclusively, of independent, outside directors; separating the positions of board chair and CEO; imposing age and term limits for directors; and providing executive compensation packages that include contingent forms of pay (e.g., Brown, 2003; Clark, 2003; Craig, 2003; Daily, Dalton & Cannella, 2003; Dalton et al., 1999; Felton & Hudnut, 1995; Hymowitz, 2003; Langley, 2003; Rich, 2003; Schultz, 1996; Silverman, 2002).

THEORY AND HYPOTHESES

It is argued in this paper that popular governance structures moderate the portfolio restructuring-performance relationship. The idea here is that due to the taken for granted nature of what constitutes sound/good governance, companies will be positively rewarded when their governance structures possess socially valid indicators of sound governance. This is an area in the restructuring-market performance relationship that requires investigation since there is significant evidence that performance, and especially market valuations, can be impacted by non-financial factors, such as alterations of governance structures. This paper examines whether the positive impact of restructuring on performance is impacted by popular governance structures - the composition of the board of directors and board leadership structure.

Board composition

One of the most widely studied governance structure is the composition of the board since many believe that its composition is a critical determinant of the board’s ability to effectively carry out its governance responsibilities (Daily & Schwenk, 1996; Fama & Jensen, 1983; Finkelstein &
Hambrick, 1996; Williamson, 1975). There is a commonly held belief in the academic literature (e.g., Bathala & Rao, 1995; Daily, 1995; Daily et al., 2003; Daily & Johnson, 1997; Daily, Johnson & Dalton, 1999; Hoskisson et al., 1994; Fama & Jensen, 1983; Monks & Minnow, 1991; Rock, 1991; Weisbach, 1988; Young, Stedham & Beekun, 2000; Zahra & Pearce, 1989) and the popular press (Brown, 2003; Langley, 2003; Nussbaum & Dobrzynski, 1987; Ozanian & Decarlo, 2003; Pozen, 1994) that the interests of shareholders are better protected when there is greater board independence (i.e., a higher proportion of independent directors sitting on the board).

Dalton et al. noted the prevalence of this belief by stating, “There is near consensus in the conceptual literature that effective boards will be comprised of greater proportions of outside directors. The corporate community is even more outspoken on this issue. Among practitioners, especially institutional investors and shareholder activists, it is not unusual to find advocates for boards which are comprised exclusively of outside directors” (1998: 270). These arguments echoed prior arguments by Hoskisson et al., who stated that “outside directors have often been viewed in the governance literature as having few costs in terms of strategic formulation and unbound benefits for governance and monitoring” (1994: 1237). Lastly, Baysinger and Butler argued that “proposals for corporate board reform devote special attention to the issues of board composition and director independence. According to many reformers, the boards of all major U.S. corporations should have at least a majority of outside directors. Moreover, the ideal board would have no director, except for the chief executive officer, who is also an employee of the firm, past or present” (1985: 102). Based on this evidence, there is a taken for granted notion that boards characterized by a predominance of outsiders, those individuals not currently employed by the organization, are ones that lead to the greatest reduction of uncertainty about managerial motives.

Signaling theory suggests that a board composed predominantly of outside directors may signal that effective controls are in place (Certo, Daily & Dalton, 2001). As such, board independence may provide investors greater confidence in the firm’s potential. Evidence of this belief was offered by Seward and Walsh (1996), who hypothesized and found evidence of their assertion that spun-off firms would create outsider-dominated boards as a means of communicating that management wanted to “do right” by shareholders and have effective monitoring in place. Here, again, there is an assumption that effective monitoring and proper governance manifests itself in the form of a majority of outsiders on the board of directors. Westphal and Zajac (1994) suggested that such changes in board composition, although substantive in appearance, might be largely symbolic since the CEO may have the opportunity to recruit sympathetic outsiders to the board (Wade, O’Reilly & Chandratat, 1990). While such changes may enhance the formal structural bases of board power, they may nevertheless decrease the board’s informal power over management if CEOs effectively control the selection process. Thus, changes in the formal
structure of the board are highly visible to stakeholders, especially institutional investors, yet the inability of stakeholders to discern what outcomes they are obtaining or the value of such outcomes makes it easier for boards to take such symbolic action (Pfeffer, 1981; Westphal & Zajac, 1994).

**Board leadership structure**

Dalton et al. noted that “As with board composition, there is strong sentiment among board reform advocates, most notably public pension funds and shareholder activist groups, that the CEO should not serve simultaneously as chairperson of the board” (1998: 271). Young et al. echoed these comments by stating that “this arrangement has been widely criticized as potentially undermining the board’s responsibility to oversee top management” (2000: 279). Lorsch & MacIver strongly advocated the independent board leadership structure (i.e., a non-duality structure), suggesting that “providing a leader separate from the CEO could significantly help directors prevent crises, as well as to act swiftly and effectively when one occurs” (1989: 185). Besides these authors, many in the academic community (e.g., Beatty & Zajac, 1994; Black, 1992; Daily et al., 2003; Daily & Johnson, 1997; Fama & Jensen, 1983; Finkelstein & D’Aveni, 1994; Lorsch & MacIver, 1989; Mallette & Fowler, 1992; Monks & Minnow, 1991; Rechner & Dalton, 1991; Rock, 1991; Singh & Harianto, 1989; Zahra & Pearce, 1989) and popular press (e.g., Brown, 2003; Dobrzynski, 1991; Geneen, 1984; Langley, 2003; Levy, 1993; Ozanian & Decarlo, 2003; Pozen, 1994; Rock, 1991) have also embraced the idea that separation of these positions is favorable for the firm’s welfare, even though there is no evidence of a direct relationship between CEO duality and firm performance.

Institutional investors and advocates of board reform have pressured firms to separate the CEO and board chair positions as a means of improving board monitoring and control of management decisions. Reforms for separation of these duties are especially notable when firms are experiencing performance difficulties (Dalton et al., 1998; Dobrzynski, 1995). Levy noted that “most separate chairmen are named during times of stress for the corporation” (1993: 10).

**The moderating impact of governance**

As previously mentioned, this paper suggests that certain governance structures improve performance by influencing the perceptions of investors and analysts, due to the fact that the positive value of these governance structures have been socially constructed and possess social validity. This paper suggests that the aforementioned governance structures are clearly what governance activists, institutional investors, the popular press, and, to a great extent, academicians view as sound and appropriate governance.
Recent research suggests the importance of financial information (e.g., earnings, cash flows, and book values) in determining equity values has decreased steadily over the past two decades (Lev & Zarowin, 1999). The decreasing relevance of financial information has motivated a stream of research that indicates the increasing importance of non-financial information in determining equity valuations (e.g., Amir & Lev, 1996; Certo, 2003; Trueman, Wong & Zhang, 2000). Despite the fact that the research concerning the influence of board of director and managerial characteristics is limited, the propositions to follow are in-line with existing research (e.g., Certo, 2003; Mavrinac & Siesfeld, 1998), which suggests that the credibility of boards of directors and management is an important factor for shareholders, boards, and, ultimately, the evaluation by the stock markets.

This paper suggests that certain governance configurations (i.e., those with greater legitimacy) will positively enhance performance not only due to the perceived economic benefits of reduced agency costs, but also social benefits resulting from symbolic actions that reduce uncertainty about managerial motives. Such symbolic actions are most effective under conditions of uncertainty, such as managerial accountability to the welfare of the firm (Meyer & Rowan, 1977; Pfeffer, 1981; DiMaggio & Powell, 1983; Scott, 1995). It is suggested that market reactions can be viewed in “terms of soft numbers that reflect the subjective perceptions of a heterogeneous audience, neatly quantified and aggregated, reacting to changes in formal policy that may be independent of substantive practices” (Westphal & Zajac, 1998: 131).

In line with prior research (e.g., Westphal & Zajac, 1998; Zajac & Westphal, 1995), it is assumed that investors are boundedly rational information processors who are interested in reducing uncertainty and value socially legitimate indications that agency problems are being addressed. This thought is congruent with evidence from surveys of large institutional investors, who were willing to pay 11% more on average for companies considered well governed – that is, companies in which outsiders constitute a majority of the board, own significant amounts of stock, are subject to formal evaluation, and are not personally tied to management (Bianco & Byrne, 1997). As such, firms with sound governance structures might be extremely effective in enhancing organizational legitimacy by attenuating concerns about managerial and board loyalties (Oliver, 1991; Westphal & Zajac, 1998). Such concerns are particularly noticeable during restructuring events because poor performance often precedes the actual restructuring, and restructuring, by itself, is a turbulent and uncertain time for the organization and its constituents.

Evidence of governance’s impact on firm performance

Within the financial economics and strategic management literature, the adoption of governance reforms have been linked with positive stock market reactions as evidenced by the prior
discussion concerning Zajac and Westphal’s (1995) and Westphal and Zajac’s (1998) investigation of market reactions to long-term incentive plans (LTIP) adoptions. A series (e.g., Brickley, Coles & Terry, 1994; Byrd & Hickman, 1992; Gaver, Gaver & Battistel, 1992; Rosenstein & Wyatt, 1994; Tehranian, Travlos & Waeglelein, 1987) of work relying on financial theory has examined the relationship between board composition and stockholder wealth. This stream of research has demonstrated that stockholders may interpret independent boards as a signal that the firm is being managed in their interest (Johnson et al., 1996).

For example, Rosenstein & Wyatt (1994) found that the appointment of outside directors was positively and significantly associated with firms’ stock price. In a study of the effect of a takeover bid announcement on the stock price of the bidding firms, Byrd and Hickman (1992) found that organizations with high proportions of unaffiliated outside directors (i.e., those individuals with no current or former relationship with the organization, whether via employment, family, or business or other professional relationship) realized higher abnormal returns following the announcement of the tender offers than did firms with fewer independent directors. Lastly, Brickley et al. (1994) reported that the stock price of firms with predominantly unaffiliated outside directors rose after the announcement of the adoption of a poison pill anti-takeover provision, in contrast to firms with a majority of inside and affiliated boards. The results of Brickley et al. (1994) suggest that the markets treat the presence of an independent board as a signal that poison pills will be used in stockholders’ interests.

Recent research is supportive of the importance of reputation as a signal of the quality and performance potential of the firm. D’Aveni (1990), for example, found that prestigious managers are important to the survival of bankrupt firms in their ability to receive greater concessions with debtors. Additionally, he noted that prestigious top managers leave the failing firm prior to bankruptcy filing and that this bailout may signal to creditors that the firm is no longer deserving of their continued financial support.

Given the need to satisfy the organization’s shareholders, firms may adopt organizational structures (e.g., certain board of directors configurations and characteristics) to signal legitimacy (Certo, 2003; DiMaggio & Powell, 1983; Luoma & Goodstein, 1999; Suchman, 1995), because “organizations that incorporate societally legitimated rationalized elements in their formal structures maximize their legitimacy and increase their resources and survival capabilities” (Meyer & Rowan, 1977: 352). As such, it is evident that boards have a symbolic role/value that is independent of the board’s tangible activities (Certo, 2003). In fact, that symbolic role becomes more salient around turbulent times (e.g., restructuring events) when investors seek ways to reduce uncertainty in the firms in which they invest.
Drawing on these arguments, it is believed that governance characteristics such as board independence and board leadership structure will positively impact the restructuring-market performance relationship. It is believed that restructuring creates uncertainty for organizations and those organizations exhibiting favorable governance structures are able to reduce this uncertainty by signaling that board of directors and managers have greater alignment with shareholders’ interests. Based on the fact that investors are interested in reducing uncertainty and therefore value socially legitimate indications that agency problems are being addressed, it is believed that the socially valid governance structures previously discussed serve as a mechanism for reducing uncertainty about managerial motives during very important times when shareholders’ interests are commonly labeled as being neglected. Thus, the presence of socially valid governance might engender a favorable stock market reaction because they appear to address the specific goals of key constituents while also exploiting more general social beliefs.

Hypothesis 1: Restructuring’s impact on firm performance is positively moderated by board independence

Hypothesis 2: Restructuring’s impact on firm performance is positively moderated by an independent board leadership structure

METHODS

Sample

The sample of restructuring firms was collected from the SDC Platinum Database published by Thomson Financial. Data was accessed from 1986 through 2000. Incorporating firms that have and have not restructured their portfolio of assets and sampling across 15 years allows for greater confidence in any causal relationships since it increases the external validity of conclusions. External validity is also enhanced by having a cross-industry sample.

In order to qualify as having restructured, a firm must have divested at least 10% of its assets, which represents significant strategic change. This criterion has been used in previous restructuring research (e.g., Hoskisson & Johnson, 1992; Johnson et al., 1993; Markides, 1992; Simmonds, 1990) and is accepted as a construct valid indicator of restructuring activity. A total of 100 randomly sampled restructuring firms were included. Each restructuring event in the database was compared against the actual SEC filings for each firm for that particular year in order to confirm the 10% rule. Specifically, the asset data was located in the firm’s ‘notes to the consolidated financial statements’ contained within the annual report to shareholders. The
average firm in my sample of restructuring firms divested 19.84% of its assets for an average dollar value of $1.63 billion.

From the same database, a randomly selected a sample of non-restructuring firms were chosen and matched up within the same time frame as the restructuring firms. A firm qualified as a non-restructuring firm if it had not engaged in any restructuring activity within a six-year period (i.e., three years before and three years after). A total of 110 non-restructuring firms were selected, however one firm was acquired in the following year, thus reducing the non-restructuring sample to 109 firms. The non-restructuring sample was statistically not different from the restructuring sample based on assets, revenues, and capital structures. The total sample size was 209 firms (100 restructurers and 109 non-restructurers).

**Variables**

Two dependent variables were used to assess post-asset restructuring performance - total shareholder returns ([share price at the end of the year – share price at the beginning of the year + dividends] / share price at the beginning of the year) and return on equity (net income / shareholders’ equity). Performance was measured in the year following the restructuring and governance structures were assessed in the restructuring year in order to assess the presence of a causal effect.

The independent variable for each hypothesis is portfolio restructuring and was operationalized as a dichotomous variable. This was done to assess differences between restructuring and non-restructuring firms. Restructuring firms were coded as 1, and non-restructuring firms as 0. The moderating variables are board independence and board leadership structure. Board independence was operationalized using the proportion of outsiders on the board of directors (number of outside board members divided by the total number of board members). Board leadership structure was operationalized using CEO duality (1 if the CEO is also the chairperson of the board; 0 if not).

Several control variables were used in this study. First, controlling for dividends is important due to its general positive impact on performance (Sanders & Carpenter, 2003). Also, research suggests portfolio restructurings that are accompanied by dividend payouts have a positive impact on performance in the post-restructuring period (Lang, Poulson & Stulz, 1995). Dividends were measured as the total dividend amount paid to shareholders in one year. Second, controlling for R&D intensity is crucial because it captures the extent of innovation opportunities within firms (Hansen & Hill, 1991; Henderson & Fredrickson, 1996; Hitt, et al., 1996; Hoskisson & Johnson, 1992), and has directly been linked with performance improvements in the post-restructuring period (Hoskisson & Hitt, 1994). R&D intensity was measured as R&D
expenditures divided by total sales. Third, it is not uncommon for firms to spend significant amounts of money in advertising to differentiate their product from those of their competitors (Sharma & Kesner, 1996). Similar to investments in R&D, investments in advertising can positively impact firm performance by boosting the visibility of a firm and, subsequently, sales revenue (Finkelstein & Hambrick, 1990). As such, it is important to control for advertising intensity (advertising expenditures divided by total sales). Fourth, controlling for total diversification is important because research suggests that positive performance accrues to those firms who experience an increase in focus/relatedness (Berger & Ofek, 1995; Bowman et al., 1999; Chatterjee et al., 2003; Comment & Jarrell, 1995; Lang & Stulz, 1994). Diversification was operationalized using the entropy measure of total diversification. Last, this study controlled for the firm’s capital structure, since a firm’s leverage may affect its propensity to engage in activities such as innovation and acquisitions, in addition to impacting the firm’s performance via its debt obligations (Hoskisson & Turk, 1990; Sanders & Carpenter, 2003). Capital structure was measured as long-term debt divided by shareholders equity.

Moderated regression was used to test the interaction effects noted in hypotheses. Separate regression analyses were run for both hypotheses.

RESULTS

Table 1 presents the means, standard deviations, and correlations for Study 2, which assesses the impact of governance structures on post-asset market valuations of the firm.

Regressing shareholder returns against the two governance structures, returned a significant finding. As shown in Model 2 of Table 2, CEO duality is significantly and negatively related to shareholder returns (p < .01). In other words, shareholders in firms with non-duality structures during the restructuring year will be positively rewarded in the post-restructuring year. This finding is supportive of the prior assertion that the presence of certain governance structures and configurations can play a role in the social construction of market value; that is, sound or good governance leads to greater firm performance. It is important to note that this finding holds true for both restructuring and non-restructuring firms. Overall, R², change in R², and significance of Model 2 are .19, .04, and .01, respectively. Models 3 (the interaction between restructuring and CEO duality) did not yield significant findings.
TABLE 1
MEANS, STANDARD DEVIATIONS, AND CORRELATIONS OF VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Me</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Diversification t1</td>
<td>0.64</td>
<td>0.58</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Restructuring t1</td>
<td>0.48</td>
<td>0.50</td>
<td>.17*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Assets t1</td>
<td>16767</td>
<td>37404</td>
<td>.18*</td>
<td>.08</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Dividends t1</td>
<td>0.94</td>
<td>0.78</td>
<td>.22**</td>
<td>-.06</td>
<td>.28**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Shareholder Return t1</td>
<td>6.04</td>
<td>13.84</td>
<td>-.07</td>
<td>-.08</td>
<td>.14*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Capital Structure t1</td>
<td>0.85</td>
<td>1.20</td>
<td>-.09</td>
<td>.01</td>
<td>.27**</td>
<td>.05</td>
<td>-.10†</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Advertising t1</td>
<td>0.02</td>
<td>0.03</td>
<td>-.10</td>
<td>-.07</td>
<td>-.06</td>
<td>.11</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. R&amp;D Intensity t1</td>
<td>0.03</td>
<td>0.05</td>
<td>-.03</td>
<td>.01</td>
<td>-.05</td>
<td>.27**</td>
<td>-.16*</td>
<td>.01</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Duality t1</td>
<td>0.88</td>
<td>0.33</td>
<td>.05</td>
<td>-.10</td>
<td>-.01</td>
<td>.16*</td>
<td>-.04</td>
<td>.13</td>
<td>.08</td>
<td>-</td>
</tr>
<tr>
<td>10 Outside Proportion</td>
<td>0.76</td>
<td>0.12</td>
<td>.11</td>
<td>.24*</td>
<td>.10</td>
<td>.19**</td>
<td>.08</td>
<td>-.01</td>
<td>-.02</td>
<td>.01</td>
</tr>
</tbody>
</table>

Notes: N = 203 for Total Diversification. N= 209 for all remaining variables. † p < .10, * p < .05, and ** p < .01. Mean and standard deviation for assets are reported in millions.

TABLE 2
RESULTS OF ANALYSIS USING CEO DUALITY TO PREDICT SHAREHOLDER RETURNS IN YEAR T1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>T</td>
<td>β</td>
<td>T</td>
<td>β</td>
<td>T</td>
</tr>
<tr>
<td>Assets t1</td>
<td>-0.111</td>
<td>-1.523</td>
<td>-0.105</td>
<td>-1.459</td>
<td>-0.105</td>
<td>-1.462</td>
</tr>
<tr>
<td>Advertising Intensity t1</td>
<td>-0.077</td>
<td>-1.145</td>
<td>-0.054</td>
<td>-0.822</td>
<td>-0.055</td>
<td>-0.833</td>
</tr>
<tr>
<td>R&amp;D Intensity t1</td>
<td>0.228</td>
<td>3.302**</td>
<td>0.184</td>
<td>2.666**</td>
<td>0.190</td>
<td>2.725**</td>
</tr>
<tr>
<td>Capital Structure t1</td>
<td>-0.030</td>
<td>-0.423</td>
<td>-0.020</td>
<td>-0.292</td>
<td>-0.021</td>
<td>-0.300</td>
</tr>
<tr>
<td>Dividends t1</td>
<td>0.173</td>
<td>2.438*</td>
<td>0.202</td>
<td>2.852**</td>
<td>0.203</td>
<td>2.866**</td>
</tr>
<tr>
<td>Shareholder Return t</td>
<td>0.173</td>
<td>2.510*</td>
<td>0.140</td>
<td>2.025*</td>
<td>0.143</td>
<td>2.061*</td>
</tr>
<tr>
<td>Total Diversification t1</td>
<td>-0.084</td>
<td>-1.219</td>
<td>-0.081</td>
<td>-1.183</td>
<td>-0.083</td>
<td>-1.209</td>
</tr>
<tr>
<td>Restructure</td>
<td>-0.028</td>
<td>-0.420</td>
<td>0.082</td>
<td>0.486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duality t</td>
<td>-0.214</td>
<td>-3.105**</td>
<td>-0.160</td>
<td>-1.546</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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An additional significant finding was uncovered when assessing the impact of the proportion of outsiders on the board and ROE. Table 3 shows the results from this analysis. As shown in Model 2 of the table, the addition of the independent variables – proportion of outsiders on the board in year t and restructuring – into the regression equation did not yield any significant results ($R^2 = .23$, change in $R^2 = .02$, and $p = .15$). However, when the interaction term was entered, significant results were obtained (positive relationship; $p < .05$). Overall, the $R^2$ for
Model 3 improved by .016, for an overall $R^2 = .25$, $p = .04$. Thus, these results suggest that variance in ROE in year $t_1$ can be explained by the interaction between the proportion of outsiders on the board during the year of restructuring.

The interaction effect is depicted in Figure 1 and provides support for the idea that shareholder returns are influenced by socially legitimated forms of good governance. Specifically, Figure 1 suggests that the combination of restructuring and greater proportions of outsiders on the board during the year of a restructuring has a positive impact on ROE in the post-restructuring year. This result did not hold for non-restructuring firms. As such, support is found for the assertion that board independence is a desirable governance structure and is positively valued by the markets.

**FIGURE 1**
INTERACTIVE EFFECT OF OUTSIDER PROPORTION AND RESTRUCTURING ON RETURN ON EQUITY
DISCUSSION & CONCLUSION

This paper addressed the moderating impact of governance on the restructuring-performance relationship. The idea here is that due to institutionalization of what constitutes sound governance, the financial markets will positively reward those firms whose governance structures possess socially valid indicators of sound governance. This is an untested area of research in the restructuring-market performance relationship that required investigation because there is significant evidence that market evaluations can be impacted by non-financial factors, such as alterations of governance structures.

Drawing on the basic tenets and arguments of institutional, resource dependence, and signaling theories it was argued that the financial markets’ reactions may reflect social benefits resulting from symbolic actions that reduce uncertainty about managerial motives (Westphal & Zajac, 1998). Institutional theorists have argued that symbolic actions are most effective under conditions of uncertainty or ambiguity (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995; Westphal & Zajac, 1998). Thus, it was argued that potentially symbolic actions such socially valid governance structures might play a role in the social construction of market value when firms are engaging in portfolio restructuring activities.

As organizational performance increases, far less uncertainty exists surrounding the health of the organization and its governance structures. As such, assessments of proper governance may only be salient (or at least more salient) in times of uncertainty and questionable performance, as is often seen with organizations engaged in significant asset-restructuring initiatives. For example, Jain (1985) noted that firm performance began to suffer approximately a year prior to divestiture and resulted in negative excess stock return of 10.8% within the one year prior to the actual restructuring event. This is supported by evidence that institutional investors, blockholders, and other large shareholders only start to focus on governance and push for modifications in times of weakening or stagnant performance (Barnard, 1991; Davis & Thompson, 1994; Stiles & Taylor, 2001). For example, Disney’s CEO, Michael Eisner, had his duality status stripped in 2004 after lackluster/stagnant performance of Disney’s stock price. Additionally, in response to this performance, Disney’s top managers pay packages were revised in December 2004 to include greater amounts of equity ownership.

Another example of an adopted reform is the use of long-term incentive plans (LTIPs – plans that focus on profitability over a multiyear period as well as on stock price) as part of executives’ pay packages (Westphal & Zajac, 1998). The use of these plans is seen as a mechanism to minimize the extent to which the interests of agents (top management) diverge from those of principals (shareholders) (Jensen & Meckling, 1976). Furthermore, LTIPs are expected to lengthen executives’ time horizons and focus their attention on creating shareholder value. The
use of these plans receives positive praise by governance reform advocates and positive ratings by *Business Week*’s (2002) “The Best & Worst Boards,” which, among other things, evaluates boards on the degree to which they link the CEO’s pay to specific performance targets.

Given the presumed advantages of LTIPs, most research investigating the consequences of LTIP adoption have found a positive market reaction to the announced adoption of LTIPs (Larcker, 1983; Brickley, Bhagat & Lease, 1985; Tehranian, et al., 1987; Kumar & Sopariwala, 1992). According to Kumar and Sopariwala, “this positive reaction is consistent with the view that there will be a lower degree of agency problems and lower agency costs subsequent to the adoption of these plans” (1992: 562). Thus, the notion of protecting shareholders’ interests through incentive alignment may have acquired institutional or symbolic value over time as an explanation for the introduction of LTIPs (Meyer & Rowan, 1977; Zajac & Westphal, 1995; Zucker, 1987).

Westphal and Zajac (1998) studied the adoption of LTIP by executives and concluded that the adoption of these programs is an important form of symbolic action, regardless of whether or not the plans are actually implemented. Additionally, the authors found that the use of agency language in the proxy statements (i.e., language that explicitly discusses how LTIPs promote shareholder interests by tying CEO compensation more closely to shareholder wealth) results in more favorable stock market reaction to LTIP adoption, again, irrespective of whether the plans were implemented. Thus, the authors argued that their study illustrated how structural or policy changes (whether decoupled or not) might provide a vehicle or opportunity for firms to manage impressions and positively impact performance.

The results contained in our study, in fact, did demonstrate that organizations are positively rewarded for exhibiting these aforementioned socially valid governance structures – boards with greater proportions of outsiders and non-duality leadership structures. Intuitively, this finding is not surprising given the fact that poor performance often precedes a restructuring, in addition to the fact that a restructuring event itself creates much uncertainty for major stakeholders. These circumstances then call for greater governance control over the firm’s executives and board, which is consistently done with mandates for greater board independence and non-duality structures.

In conclusion, while conventional and institutionalized agency perspectives assume that the positive moderating impact of these governance structures reflect economic benefits from reduced agency costs, a perspective based on institutional, resource dependence, signaling, and impression management theories offer a different interpretation – market valuations may instead reflect social benefits resulting from symbolic actions that reduce uncertainty about managerial motives. Such symbolic actions are most effective under conditions of ambiguity and/or uncertainty (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Pfeffer, 1981; Scott, 1995;
Westphal & Zajac, 1998), and, as such, serve as insight into the moderating impact of governance on the restructuring-performance relationship.

REFERENCES


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1, 2, 3, BLOG: THE USE OF WEBLOGS AS AN EFFECTIVE AND EFFICIENT KNOWLEDGE MANAGEMENT TOOL IN THE CLASSROOM

Delaney J. Kirk, University of South Florida, Sarasota-Manatee, dkirk@sar.usf.edu
Timothy L. Johnson, Drake University, tjohnson@carpefactum.com

ABSTRACT

Based on their experiences in a combined 22 business courses over the past three years, the authors believe that weblogs (blogs) can be used as an effective pedagogical tool to increase efficiency by the professor, enhance participation and engagement in the course by the students, and create a learning community both within and outside the classroom. In this paper they discuss their decision to use blogs as an integral part of their course design to contribute to both explicit and tacit knowledge. In addition, suggestions and cautions for using this new technology are presented.

INTRODUCTION

“Technology challenges people's assumptions about what it means to be educated. Technology and globalization have changed the way we do business; as a result, we have seen the emergence of a lifelong learning culture, one in which education allows us to keep pace with change. Moreover...technology changes both the ways in which we learn and the ways in which we conceive of the learning process...We have grown increasingly aware that learning facts is not enough. Knowledge management in particular is leading us to question our focus on explicit knowledge, gained from textbooks, and our relative neglect of tacit knowledge, gained from experience. Tacit knowledge consists of knowing how to get things done, wisdom acquired through years of practice” (Morrison & Oblinger, 2002, p. 2).

As faculty, we are experienced in presenting explicit knowledge on a particular subject. However, organizations today want employees who can “integrate both explicit and tacit knowledge into the productivity equation” (Asllani, Ettkin, & Somasundar, 2008, p. 218). As teachers today, we must be “facilitators of knowledge creation instead of disseminators of knowledge” (Bilimoria, 1997, p. 241). In other words, we must create a permeable class environment where students ‘learn how to learn’ and can apply their knowledge and skills in the unpredictable environments they will face in their lives and careers. This permeable classroom, as defined by Sandy (1998), is “one in which the knowledge generated within it is extended
beyond its boundaries” and thus students in this setting are more likely to make connections between what they have learned and the “real world” (p. 47). In order for this to happen—for students to become self-motivated, engaged, critical thinkers—faculty will need to “shift away from the traditional-centered class to one that allows students to take responsibility for their own learning” (Costello & Brunner, 2008, p. 63).

We decided to accept this challenge of helping our students gain explicit and tacit knowledge but in a manner that is effective and efficient for both students and faculty. We noted that Whetten (2007) grew to believe that the most important way to add value as a teacher was in the course design, which he identified as the careful planning of how the chosen reading material, assignments, and activities would support learning objectives. We also noted that Fink (2005) believed that, “In order to teach well, one must be competent in both course design [what you will have the students do] and teacher-student interactions” (p. 3). Course design should maximize teacher-student contact, cooperation among students, prompt feedback, time on task, high expectations, respect for diverse talents and learning styles, and active learning in order to encourage effective student learning (Whetten, 2007; Chickering & Gamseon, 1987). This requires setting up a context that facilitates student engagement, including communicating the class agenda to students and maximizing student participation through allowing everyone the chance to contribute their input and experience (Auster & Wiley, 2006).

According to Whetten (2007), our learning objectives need to be enacted through our choices of what we ask our students to do and how we evaluate them. One way to aid our students in their quest for knowledge is to model how to use the Internet to obtain and evaluate information (Harmon, 2007; Wills, 2004). Arbaugh (2008) noted that management education is increasingly incorporating at least some aspect of online technology into classroom content delivery, assessment, and/or management. By using the Internet, we have “opportunities for treating teaching and learning as truly social activities where knowledge is built through interaction and dialogue rather than lectures and recitation” (Deitering & Huston, 2004, p. 273). Research by Terry, Doolittle, Scheer, & McNeill (2004) indicates that meaningful Web-based learning can take place through careful course design and use of multimedia learning environments.

A blended learning approach allows us to augment our traditional classroom instruction with opportunities to continue discussions, analyze cases, and access course documents (Martins & Kellermanns, 2004). This “learning that is distributed across space, time, and various media” involving both face-to-face teaching and online resources has had a “positive impact on student achievement” (Kitsantas & Dabbagh, 2004, p. 120). Birenbaum (2004) concurred that supplementing in-class instruction with a web-based learning community will “elicit individual and group knowledge construction” (p. 148), thus preparing students “to create, apply, and disseminate knowledge and continuously to construct and reconstruct their expertise in a process
of lifelong learning” (p.144). Others agree that technology can be a valuable instructional tool that accommodates diverse styles of learning and allows students to be more active in growing their own new knowledge (Brownstein, Brownstein, & Gerlowski, 2008; Watkins, 2005; Salisbury-Glennon, Young, & Stefanou, 2001).

One downside to using new technologies is the time necessary to get up to speed. Bilimoria (1997), as is typical of many management educators, was reluctant to take time away from tenure-earning research to incorporate technology into her courses. Her blending of an online discussion board format with a regular face-to-face format was a relatively small change motivated by the ability to structure learning activities that improved communication between and among students and teacher. Her process goals were to extend the class in two ways: link class content concepts with real-world events, and maximize student participation. By the end of the term, she came to appreciate the importance of providing opportunities for students to practice the information-gathering and critical thinking skills needed in today’s world where electronic communication technologies reign.

Using technology also appeals to our students. Proserpio and Gioia (2007) concurred that management educators need to consider the learning styles and habitual attention processes of the so-called “virtual generation”—the 80 percent of 18-24 year-olds who have internet access and who are familiar with, and varying ly fluent in, such communication expectations as asynchronous downloads, and synchronous and asynchronous one-to-one, one-to-many, and many-to-many communications. Students who use such technologies have ready access to information and to peers, and so have come to expect connectivity, generous amounts of free information, and fluency with software protocols. However, as noted by Costello and Brunner (2008), it’s important to provide guidance when designing a course that involves increased student engagement and responsibility in order to help the students deal with ambiguity and a perceived shift in locus of control.

**OUR DECISION TO USE BLOGS AS A PEDAGOGICAL TOOL**

Three years ago we decided to experiment with one type of technological application, weblogs, as part of our course design in our management classes. We believed that weblogs (commonly known as blogs) would be an efficient way to communicate information on class expectations to our students. We also believed that they would create opportunities for engaging students in conversation with us as professors, with their fellow classmates, and with outside resources. We saw advantages to blogs in allowing us to insist on, and track, 100 percent participation in course discussions, to provide links to timely articles and podcasts, and to invite experts into the conversation, all to create an environment where students not only experience the subject matter but also learn how to find credible sources for learning in the future. This invaluable skill of
learning how to read, evaluate, and respond to information found on the Internet would help our students update both their explicit and tacit knowledge throughout their lifetimes. As noted by Asllani, Ettkin, and Somasundar (2008), organizations are using blogs both internally to disseminate information among employees and externally to provide up-to-date and easily accessible information to customers and clients. Thus, a familiarity with how blogs can be used would benefit the students beyond the classroom experience.

However, as noted by Lohnes (2006), little has been written on how to use blogs as an integral part of academic coursework. Du and Wagner (2007) found in a limited study that “weblog performance can be a significant predictor of students’ learning outcomes [such as final exams] and possibly a better predictor than traditional coursework measures” (p.10). In that study, students using blogs were more active in seeking external knowledge sources and explicating information from these, and one-third of the students did more work on the blog than was required by the syllabus. Asllani, Ettkin, and Somasundar (2008) found blogs to be more effective than discussion boards when used to communicate tacit knowledge. Hurlburt (2008) did note the importance of building in student accountability in regard to reading and responding to blog content, in order to facilitate student ownership of the learning process.

We came to our decision to try class blogs as part of our course design for a number of reasons. We liked Martins and Kellermanns’ (2004) claim that “transferring administrative and purely informational aspects of instruction…[outside the classroom] frees up class time for students to work on interpersonal and communication skills” (p. 8). We tried using email to communicate critical information to our students between class periods but it seemed that this was not very efficient as we had to respond to the same questions over and over. In addition, email did not seem to be effective either as we had to deal with a number of the students who claimed they never saw or read their email. In addition, we believed it crucial to communicate our high expectations and guidelines to our students and wanted the flexibility of sharing information on an “as needed” basis. Thus, using a class blog allowed us to be more effective and efficient in communicating with our students.

Another reason for our decision to use a class blog was ‘time on task.’ One of the authors began teaching a weekend class that met only once a month and he was worried about the ‘fadeout effect,’ knowing that many of his students wouldn’t think about the material between classes. We also believed it important for all of our students to participate in class discussions but, despite our best efforts, on many days only a small percentage of the students ever had anything to say.

And finally, and most importantly, we wanted to see our students take greater ownership of their own learning, not only for our classes but in their future lives. We fully believed that we needed
to help them find ways to gain both explicit and tacit knowledge. Thus, we began our journey of using blogs as part of our course design. Over the past three years, the two of us have used blogs in 22 different classes, both undergraduate and graduate level, and in a variety of ways, as we discuss below.

WHAT EXACTLY IS A WEBLOG?

The term, weblog, is defined as a “frequently updated website, normally with dated entries and usually with the newest entries at the top” (Merriam-Webster Online Dictionary, 2008). It is estimated that there were only 150 blogs in the late 1990s (Trammell & Ferdig, 2004). However, this number increased to 10.3 million blogs in 2004 (Quibble, 2005) and to over 70 million in 2007 (Sifry, 2007). According to Technorati, an Internet site that tracks and indexes blogs, this number had grown to 112.8 million by July 2008, with 175,000 new blogs being added each day (Technorati website, 2008). Blogs are no longer just for teenagers or for those wanting to rant about politics or the doings of Hollywood actors. Blogs are beginning to have an increasing presence in both the educational and business worlds. Even churches have embraced the technology, using blogs as one way to reach out and attract new members (Sagario, 2008).

Weblogs differ from traditional websites in several distinct ways (Quibble, 2005). Websites tend to be static and do not change often; blogs are dynamic and usually added to frequently by the author (or authors). Also, the readers of the blog can respond to the writer’s text by making comments that can then be read by other readers. In addition, blogs are much easier to add content to because they do not require the expertise and special programming software to start or update as websites do. In fact, the major reason for the growth in blogs is that “software companies created the database-driven content management tools needed to run blogs so that non-coders could start their own blogs” (Trammell & Ferdig, 2004, p. 61). In other words, blogs have become easier to create than a webpage. As noted by John Raleigh, a website designer, “adding a new post [on a weblog] is as easy as sending an e-mail” (Demopoulos, 2007, p. 4).

THE IF (IMPACT-FOCUS) CIRCLE OF INSTRUCTIONAL BLOGGING

Before introducing a class blog to our students, we had to determine the focus it should take to help in achieving our learning objectives. We determined that this depended upon the course being taught, our teaching philosophies, and the comfort level we each had with giving up some control in our classrooms.

Edbauer writes that the typical response she gets from colleagues when she shows them some of the blogs on the Internet is, “Cool! But, how in the world would I actually use this” in my class? (Edbauer, 2004, p. 1). How blogs are used depends on the professor’s teaching style and course
subject matter. We determined three possible approaches that varied from instructor-focused, featuring one-way communication from faculty to students; learner-focused, using two-way communication between faculty and students, or an interactive community-focused teaching tool between and among the students and the professor, as well as others identified as experts to create a virtual learning environment. In other words, blogs can be used as a more efficient method to communicate information, as a way to get increased participation from students, and/or as a method of creating a virtual learning community. Figure 1 lists various ways of using these three approaches to blogs in the classroom.

**FIGURE 1**

**The IF (Impact-Focus) Circle of Instructional Blogging**

Instructor-focused blogs

The simplest way to use a blog is as a one-stop source where the professor posts syllabi, announcements, assignments, and links to articles and websites for the students to read. Faculty retain ownership of the site and students are expected to access the blog on a regular basis to obtain class information. The blogs allow the professor to be more efficient as he or she doesn’t
have to make copies of course materials and can point students to the blog for answers to questions on assignments. Sample papers or grading rubrics can be posted to guide students in understanding expectations. The blog is also a good way to hyperlink to visual aids used in class so that the students can access these. An instructor-focused blog may be the best approach for classes that don’t involve a lot of discussion. As noted by a colleague who teaches finance, “I deal with questions such as, ‘what’s the present value of $500 received five years from now if the interest rate is 8%?’ The one and only right answer: $340. Not much discussion needed here.”

However, we found that it is easy to move beyond ‘the student as passive recipients of content’ stage by posting weekly questions or links to relevant articles and requiring the students to comment on these. Delaney Kirk has used a class blog in teaching management courses for several years because she gets 100 percent participation to questions she posts on their blog (Demopoulos, 2007). Zane Quibble used a blog to post scenarios of a poorly written business letter in his Business Communication courses. The students then respond as to what should be done to correct the letter using techniques they were learning in class (Quibble, 2005). Even our finance colleague mentioned earlier would be able to link to current articles and have the students read and comment, thus allowing the professor to see if the students understood the concepts being taught.

Learner-focused blogs

In this approach, the professor would expect the students to be more active participants in the blog. Learning can occur peer-to-peer in addition to teacher-to-student. Students could write their own posts or comment on what they had been learning in class, relating the course topics to work and personal experiences. Students could create their own portfolios of their writing and get feedback from their fellow classmates. They could also create learning journals, a technique strongly advocated by Ramsey (2002) except in this case these would be online and easy to access offsite. Faculty can have students create their own individual blogs on topics either chosen by the instructor or by the students themselves. In this instance, the student creates and owns the blog, and the professor (and potentially classmates) is the commenter, thus giving the student more control over his or her own learning experience.

Sparacio and Witonsky (2006) advocate using learner-focused blogs as they believe that “teaching can be significantly enhanced by the integration of blogging” (p. 2). They have their students in a course in Logic & Reasoning develop their own blogs on a specific topic of their choice that they then write about during the course of the semester. According to them, the students tend to put more effort and care in their work as they got to choose their subject matter and they know that their peers in the class are reading their work.
Liz Kleinfeld (2008) at Metropolitan State University at Denver also has students develop their own blogs in her English composition classes. She gives them ten minutes in class to blog on a topic developed from activities or discussions that day or from the previous class. She sometimes does this at the beginning of class and other days at the end and doesn’t allow the students to make up the assignment, thus also modeling her value of on-time attendance.

Tom Nelson uses group blogs in teaching rhetoric classes at the University of Texas. Each “blogger group” writes on subjects such as politics, music, or technology. Nelson allows his student groups to decide on their own goals and guidelines for posting and commenting on the blogs and finds this helps in building a collaborative learning environment (Edbauer, 2004).

**Community-focused blogs**

A third approach to using blogs is to involve participants from outside the class itself. Students could be required to find, read, and evaluate blogs from “experts” outside class on assigned topics and then to share this information with their classmates. Tryon (2006) incorporated the requirement that his students read blogs in his first-year English composition classes in order to encourage students to be active participants rather than passive consumers and thus make a connection between the classroom and the ‘real world.’

Students can also develop questions related to course topics and contact others outside of class who participate as “guest teachers.” One of the authors of this paper was asked questions in class on how to manage people with disabilities. She went on the Internet and found a man who was blind and another whose legs were paralyzed who both agreed to help. She then had the students post their own questions on the blog. The students had questions such as:

*I’d like to know what the best technique is to offer help to a disabled person without making him/her uncomfortable or even getting on his/her nerves. This is especially tricky when the disabled person is an introvert and is uncomfortable with asking for help. Is there some middle ground where both parties can meet and be comfortable?*

*It would be helpful and interesting for me to know about past experiences (very good or bad) you have had in the workplace that you would not mind sharing. This would help me understand how I can make the work environment more comfortable.*

*Do people who are blind get scared when they hear noises from people or objects near them if they didn’t know they were there? How do they not get hurt on a daily basis?*
Obviously, having someone who has a disability to answer the students’ questions contributed greatly to the learning process and will enable the students to become better managers after graduation. The students took ownership of the process by posting their own questions on the blog and then reading and commenting on the answers shared by the outside participants. In addition, they were able to share their own personal and work stories with their classmates. As noted by Gould (2002), “research evidence and common sense tell us that students learn more about a subject when they are emotionally involved with the intellectual context being taught” (p. 23). Thus, designing the course to provoke curiosity and emotional reactions can bring about insights and learning.

In some of our other classes, we contacted authors of books that the students were reading and asked them to contribute comments and feedback on the class blog. As you can imagine, the students were very excited to have meaningful interaction with the person whose book they were discussing. Opening up the learning process to include personal connections with book and journal authors, subject matter experts with their own blogs, and others including potential employers created a virtual learning community unlike anything we had ever done or even envisioned in the physical classroom. One student summed up the experience as follows:

I thought it was so great to have the author of one of the books in our class write comments on our class blog. I never realized that published authors would be interested in participating. It gave a whole new meaning to my reading of his book.

OTHER DECISIONS WE MADE IN SETTING EXPECTATIONS FOR THE BLOGS

In addition to deciding the focus of the blog used in each class, we had to choose how we would communicate our expectations to our students. This involved how we would grade participation, deadlines we would enforce, whether we would password protect the site, the quality and quantity of writing we would expect, and how we would enforce these guidelines. In addition, we decided it was important to discuss “Netiquette” with our students as to issues of appropriateness and respect.

Grading policy

Just as with any other assignment, we had to communicate our expectations on blog participation to our students. Below is a sample policy we used:

Every few days, I will create a new blog post, and you will be expected to comment within 72 hours of the post going up. I will grade your comments based on content rather than
length (actually, shorter comments on blogs are more generally welcome than longer ones). It will be up to you to balance relevance with brevity.

In addition, since students tend to do what they are rewarded for, we decided it was necessary to allocate points toward blog participation. Table 1 contains a sample rubric used to grade blog comments. We basically agreed with the approach to grading blogs espoused by Liz Kleinfeld (2008):

> As far as grading goes, I made the blogs worth 15% of the course grade. To earn a B, blogs have to be complete and, for an A, blogs must be complete and, as I explain on the syllabus, “I should be able to tell that you have used your blog entries to challenge and stretch yourself as a researcher and writer (for example, your blog entries may be exceptionally detailed, specific, thoughtful, and probing).” The grading criteria are pretty soft, but still, there’s a wide range of grades students earn on the blogs.

<table>
<thead>
<tr>
<th>TABLE 1: SAMPLE RUBRIC FOR GRADING CLASS BLOGS</th>
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<tbody>
<tr>
<td><strong>To earn an “A”</strong></td>
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<tr>
<td><strong>Frequency</strong></td>
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<tr>
<td><strong>Readings</strong></td>
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<tr>
<td><strong>Class content</strong></td>
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<tr>
<td>Personal application</td>
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<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Other elements</td>
</tr>
</tbody>
</table>

**Set deadlines**

In the classes where we required the students to comment on assignments or to respond to our discussion questions, we find it useful to set deadlines to encourage the students not to put off accessing the blog until the last minute. For example, we might set a deadline of midnight on Monday for a Wednesday morning class that met once a week. This gave us time to read over the comments on Tuesday and prepare responses to cover in Wednesday’s class lecture.

**Decide whether to password protect the blog**

Setting a password is easy and means that only those who know the password can access the information in the blog. For most, but not all of our classes, we decided it best to have a closed blog so that the students will feel more comfortable making comments. One of our reasons for using a password was disclosed in a syllabus as follows:
This blog has been set up in an “unpublished” format meaning that your comments will only be read by me and the other class participants; nothing written on this blog will show up in search engine results.

Communicate expectations as to quality and quantity of writing

We had very different views on this. One of us believes it’s all about the content and wanted his students to focus on just getting their ideas and thoughts written down; the other author, however, believes content is important but that presentation is equally important (spelling, grammar, etc). This difference in teaching philosophies affects course design and obviously was an expectation that needed to be shared with the students.

Also, because of the novelty of social media, we found it important to set appropriate expectations of student behavior and activity for blogging. We found some students would comment to an extreme, while others did not take the assignment to blog (or to comment on a class blog) seriously enough. Obviously, we had to be the ones to set and enforce performance expectations. In some classes where this was a problem, we gave the students samples of blogposts and quality comments to let them know what we expected.

Another issue that we had to address was plagiarism and citation. Just as faculty have to address this with hard copy research papers, we spent time explaining why and how to cite sources when posting content on the class blog.

Enforcement of guidelines

Enforcing the policies on blogging in a class setting is no different than enforcement of any other classroom policy. Most of our credibility as classroom managers hinges on consistency and reasonability of the policy and its follow-through. On occasion we were asked to grant exceptions and decided to look at these on a case-by-case basis. For example, one student did not complete the blogging component of a class which was 30 percent of the final grade. However, in this case there were extenuating circumstances: the student lived in an area that was hit heavily during the 2008 flooding in Iowa during the time frame of the summer class and both her home and workplace were impacted. Typically the ability to make comments on the class blog can be closed, effectively blocking students from entering comments after the assigned date.

Teach “Netiquette” to students

Occasionally, a student would write an inappropriate or unreasonable comment or blog post, either stemming from personal beliefs and values or possibly as a test to see how others would
One of the authors used a blog in a class for management majors titled *Managing Diversity*. She posted an assignment requiring the students to read a current newspaper article on the firing of a city manager after he revealed he was planning to have a sex change operation. Most of the students were indignant and wrote that this shouldn’t have anything to do with how the man performed his job. However, one student wrote:

> After reading the article on the Largo city manager, I feel like the right thing to do is be politically correct and say that I feel an injustice has been committed. My true feelings get in the way because I think this guy is disgusting. I don’t understand what kind of mental state a man has to be in to decide that he wants to become a woman...It may not affect the managerial skills that this thing has used for the past 14 years, but anyone that would have this procedure has serious psychological issues and shouldn’t be in a position of leadership.

Obviously the professor felt the need to make this a ‘teaching moment’ as she was trying to promote the inclusion of people perceived as ‘different’ from ourselves. This took both classroom management skills as well as an ongoing rapport with the students to achieve but ended up being a worthwhile exercise that probably would not have occurred in the physical classroom (Kirk & Durant, 2009).

Another consideration is respect and privacy for others. In one of our classes, students were assigned a consulting project with local small businesses and not-for-profits. If a student writes disparaging comments on his or her blog, it can have an adverse impact on that organization. In addition, it makes it difficult for the professor to convince other businesses to be involved with projects for future classes. This instructor now advises students to speak of these companies (and their management) in general terms which would not specifically identify them.

Two of the overriding themes that students need to understand when expressing themselves on blogs (or other social media) are common sense and common courtesy. One of our students wrote about a variety of psychological disorders and personal problems which she was experiencing. While this information put into context some of her other classroom performance issues, it was not relevant to the assignment and was certainly more information than she needed to provide.

**WHAT HAVE WE LEARNED FROM OUR USE OF BLOGS IN OUR CLASSES?**
In the three years we have experimented with using blogs as a pedagogical tool, we have incorporated these into undergraduate courses in Principles of Management, Organizational Behavior, Managing Diversity, and Human Resource Management as well as in graduate courses in Leadership, Creativity, Project Management, and Corporate Politics.

For the most part, the students were familiar and comfortable with using the Internet so the format was easy for them to use. The most recent information posted is listed at the top of the blogpage and the students can even have updates forwarded to their email accounts. As faculty, we retained control over the class blogs and could decide whether to password protect these so only class members could access or to make the information open to others outside the class. Course management systems such as Blackboard and WebCT have blog capabilities and there are also other free or inexpensive sites such as Typepad, Blogger, or Edublogs. We found that we only needed to be tech comfy, not tech savvy, as all blog writing is done in a Word document and does not require any programming skills.

We found blogs to be much more useful than just discussion boards in terms of ownership and ability to hyperlink to journal or newspaper articles and other blogs. A blog is controlled by the person who created it; others can comment but cannot create blogpost content unless given administrative access. As noted by Trammell and Ferdig, “On a discussion board anyone can start a thread of conversation and all contributors have the same editorial authority” (2004, p. 61). We agree with Asllani, Ettkin, and Somasundar (2008) that blogs appear more successful than discussion boards in communicating tacit knowledge.

We asked our students for feedback about their experience of the class blogs at the end of each semester. The students’ responses were overwhelmingly positive to both the specific use of blogs in the classroom and to the use of online learning in general. The major themes reflected emerging trends from both academic and social influences.

**Blogging invites more students into the conversation**

Students who were unwilling to speak up in class indicated they felt more comfortable writing their thoughts and responding to the thoughts of others in a blog/comment format. In addition, using a blog allowed students with different learning styles (for example, visual learners rather than auditory or those students who would rather reflect before answering) to interact with the class.

*The blog structure...allows us to express our opinions and experiences when we may not otherwise be able to [and] we got to hear a lot of different perspectives on a lot of different subjects.*
I thought that the use of a blog as a teaching tool was a very creative way to get everyone involved. I have found that one of the greatest resources in this program is my classmates. Learning from their different experiences and listening to their different points of view helps to bring my learning experience full circle.

Blogging extends the conversation

Allowing students to participate in mini-conversations via blogs keeps the classroom conversation alive even when the students are not physically present. As universities create flexible class times and schedules such as night and weekend courses to meet the needs of the students, using blogs may be even more useful in preventing the fade-out effect.

Often after class ended, I would think of good points that I could have added to the discussion. However, after the week’s gap, those ideas are long forgotten. Also, some students are not as outspoken as others and often their opinions do not get heard. Having the ability to share these unspoken thoughts would benefit the class as a whole.

I found the blog to be very effective as a learning tool, mainly because I am one of those more quiet people in class. Things don’t always come to my mind right away, but once I give them time to sink in and realize how I really feel, this is when I find the blog to be quite useful. It also allows me to express myself more clearly and to allow others to become familiar with my point of view.

Classroom blogging provides a “safe” mechanism for introducing students to social media

Even with the proliferation of blogging, Facebook, and Twitter, there are some students who were only vaguely aware of social media and its possibilities. Once students see how blogs can be used, they begin to realize the business benefits of extending “conversations” to the online world. As the following comments show, while the students may resist a classroom blog at first, they quickly embrace the medium and start seeing ways to use these in both their professional and social lives.

Occasionally we would have a student ask why we were using a blog in their class rather than one of the standard university course management programs. Our response was that while these educational software packages can be useful (and we do use their gradebook function), these programs are not available outside the academic setting. Learning to use blogs is a skill that translates to the business world. Many organizations are either developing their own in-house blogs and/or keeping track of what is being said about their products and services in the blog community.
This blogging experience has been informative for me as well. The longer that I am in this MBA program, the more I realize that I am one of the few people that do not read blogs on a regular basis and after this class, I may have to rethink that. It has been fun.

The blog is great! I know I’m still being dragged in but rest assured that I’m coming around. ... The “peer pressure” actually did wonders for me. I will be entering the blog world soon. I definitely have seen the social aspect work and it does make me very curious about the professional benefits.

As this is my first experience blogging it took a few weeks to become used to this media, as I am far more familiar with classic paper and e-mail based communications. This type of collaborative technology was a unique approach to class assignments, but a necessary experience as blogs are becoming more and more popular in the workplace. After submitting a few assignments, I became very comfortable using this technology.

Blogging makes the students into subject matter experts

This process of creating a blogpost or answering a well-crafted question requires students to search for, filter, and then share information found on the Internet. The process exposes students to vast amounts of information and in the process makes they become more knowledgeable on a topic. Doing this on a regular basis “creates a repetitive process where the blogger student can build on what he learned last week and find more advanced information for the current week,” thus increasing both explicit and tacit knowledge (Trammell & Ferdig, 2004, p. 62). In one of our classes on leadership, one student started thinking about applying his personal brand to his class blog and was able to transition into a new career for himself in a field he was passionate about.

Blogging helps students take ownership of their own learning

We have been pleasantly surprised by the depth and breadth of our students’ blog comments and posts. They tended to spend more time and effort than required by the assignments. When given a choice of using a blog or a more traditional paper method of journaling, those with blogs appeared to be more creative as they were leveraging online resources, linking to other blogs, and finding meaningful graphics. The students who wrote in more traditional ways (even using a word processor) tended to stay strictly within the stated expectations of the assignment.

THE DOWNSIDE TO USING BLOGS
Although we found many advantages to using blogs, there are disadvantages as well. Finding the time to post on the blog and read comments made by students can feel overwhelming. It’s important to treat blogs like any other assignment, and budget time to provide adequate feedback. We found that spending more time reading and responding earlier in the semester helped prevent problems later, and allowed us to see the students’ thought process mature and expand. Setting a deadline by which students must comment was very important to allow time to read and respond. We have considered setting a word limit to make reading the students’ comments more manageable and to aid the students in learning to be more succinct in their writing.

Another issue can be the comfort level of the professor with technology and new teaching methodologies. While writing a blogpost is essentially as easy as sending an email, the prospect of using it as a classroom tool can be daunting. We found that using an instructor-focused approach the first time helped with the learning curve of having a class blog.

Some students and faculty may perceive communicating online as a loss of a personal connection. It does negate the ability to observe body language and vocal tone, both of which contribute heavily to the communication process. However, we found the 100 percent participation rate far offset this perception that effective communication needs to be in person. In addition, we find that students today are quite comfortable with communicating online, either by cell phone, text messaging, or through social networking sites.

Allowing students to comment on each others’ blogs may have some potential draw-backs. Students may not be as open to sharing their thoughts and opinions if they know someone other than the professor is reading it. Hurlburt (2008) notes that these feelings of insecurity are usually temporary and vanish as the students get more comfortable with the class and their peers. Table 2 summarizes some of the advantages and disadvantages to having a class blog.

### Table 2: Advantages and Disadvantages to Using Class Blogs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Independent of institution-run software issues and maintenance schedules</td>
<td>□ Many instructors lack a comfort level with blog technology</td>
</tr>
<tr>
<td>□ Provides communication medium between in-classroom experiences</td>
<td>□ Can create more work for the instructor (developing content, reading student blogs and comments)</td>
</tr>
<tr>
<td>□ Allows “quiet” students a forum for expressing themselves</td>
<td>□ Students may be uncomfortable sharing information through this medium</td>
</tr>
<tr>
<td>□ Format allows instructors to</td>
<td></td>
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</tbody>
</table>
disseminate information quickly and accurately outside of the classroom  
- Information is available electronically for students to access from home  
- Lower cost than making hard copies  
- High comfort level with blogs among Generation Y students  
- Promotes learning community between and among students and gives them a feeling of ownership  
- Students may put more effort toward their writing knowing it will be read by their peers as well as the professor  
- Gives students skills in obtaining and evaluating knowledge found on the Internet  
- Allows for teachable moments that might not take place in physical classroom  
- Students perceive a “cutting edge” factor in their classes from using blogs as a powerful communication tool  

- Instructors may not understand how to use the blog effectively  
- Student writing might be more casual and sloppy compared to turning in hard copies  
- May be seen as not as useful in classes that do not require discussion  
- Students may resist commenting if it is not made part of their grade  
- Students must have access to computer and Internet to participate  
- May be difficult to keep students focused on topics they are to discuss  
- Students may write what they think professor wants to see rather than their own thoughts and feelings  

One last issue: as students link out to other sites, their posts and comments may become visible to the public on social search engines such as Technorati. Thus, it might make sense to password protect the class blog. However, on the other hand, if you think of blog readers as “participants in conversation,” this can be beneficial. It has provided our students a way to begin conversations with book authors who blog, with subject matter experts in their fields of study, and with other interested students.

CONCLUSION

While weblogs can be useful, it is important to note that they are just tools and not the objective itself. They are not for everyone or for all classes and need to be made an integral part of the course design. However, as noted by Trammell and Ferdig (2004), theoretically the use of blogs as a learning tool seems to be low-cost with high-returns. Technology will continue to influence learning. According to Diana Oblinger, “Already, our focus has shifted from teaching to learning...Much of what we have done in the past has been constrained by the prevailing conception of the classroom, but the lecture and the lab are only two ways to learn...The next
step may be the integration of knowledge management and e-learning systems to augment current practices” (Morrison & Oblinger, 2002, p. 3).

Student acceptance of technology in the classroom requires its perceived usefulness and ease of use (Martins & Kellermanns, 2004). We tend to learn best when we need information that we can put to use immediately. Blogs allow faculty and students to access information as it is needed and to make connections between explicit knowledge from our textbooks and tacit knowledge that shows us how to use the information gathered. Blogs also introduce students to online learning communities so they can share information, evaluate knowledge, and construct new learning paradigms for themselves. Effectively modeling ways to use blogs as a teaching and learning tool is a useful skill for our students to have.

As noted by Arbaugh (2008), more research needs to be done on “what constitutes effective blends of classroom and on-line education or what contextual factors most influence such blends” (p. 130). However, the technology is here to stay and our tech-savvy students are, for the most part, comfortable with the incorporating of Internet tools into their learning. As one student noted:

I really enjoyed the use of blogs as a teaching tool. Reading what our peers have experienced and hearing their stories allows us to gain a better understanding of not only the subject matter, but also how to handle ourselves in a situation that we could face in the future.

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ON THINKING: SCHOLARLY PAPERS AND BUSINESS EDUCATION
Janice A. Black, California State University, Bakersfield, jblack@coastal.edu

ABSTRACT

As business scholars, our duty to our profession is to train our students in rigor in scholarly activities, as well as, to address issues that are important to businesses. Often in graduate business education, we meet these two criteria via term projects. While our students may have recent field experience, they typically have low scholarly skills. Our conundrum is to jump-start students’ scholarly skills while introducing them to new concepts to apply in the field. This paper provides a set of linked assignments based on learning theory that result in higher quality student learning and output.

INTRODUCTION

In the current economic climate, it perhaps comes as no surprise that business education and graduate business education in particular has come under fire. Business education critiques didn’t start with the current round but have routinely cropped up usually to address areas of weakness. After the first settling of business into a separate discipline, there was a critique of a lack of rigor and a following emphasis on statistics and mathematics (New York Times). More recently, there have been calls for more “soft” skills and a more practical approach (Mintzberg, 2004). Yet, this paper’s argument is that Management’s moral failure is not in its periodic swings of emphasis, but in a failure to educate. We have failed in helping students learn to think, to research, to reflect, and to learn to learn. This failure is not the sole responsibility of higher education but as tertiary faculty members, we need to step up and reclaim “collegiate” education. As faculty in an applied discipline, we must also embed these skills in the applied context.

There has been much to do about developing our graduate programs so that they provide value to our students and their employers (Gosling & Mintzberg, 2006; Wensley, 2005, Mintzberg, 2004). Both the content (Mintzberg, 2004) and the process of education have been brought into question (Whetten, 2007). With new educational technology available (Chen & Bradshaw, 2007; Jackson, 2007) and changes in our student bodies (Garvin, 2007; Tushman, O’Reilly, Fenollosa, Kleinbaum & McGrath, 2007), there have been calls for changes in our teaching methods and learning orientations (Whetten, 2007; Chen & Bradshaw, 2007; Orr, 2007).

One of the more significant shifts in higher education is one that moves from being teacher centered to one that is learning centered (Barr & Tagg, 1995). Research has shown that students who write are more engaged and those who write for others besides the instructor receive an even greater impact from the course (Light, 2001). Indeed the whole idea of using writing to
learn about the material is gaining momentum (Russell, 2007; Carter, Ferzli & Wiebe, 2007). Yet, this does not mean just giving the students an assignment and having them turn in a term paper (Whetten, 2007; Light, 2001) but rather providing guided direction on the process to handle an assignment (Chen & Bradshaw, 2007). Indeed, a series of shorter assignments with multiple opportunities for feedback improves student learning (Light, 2001; Whetten, 2007; Barr & Tagg, 1995). Yet for the best results, these shorter assignments should be integrated into a cohesive whole (Whetten, 2007).

This paper presents a term long project that requires higher level thinking, higher level reading, and a stretching of students into new academic and personal learning skills. The project has several shorter assignments that culminate in an applied team project. The project requires students to read scholarly papers and to link those papers to other educational and personal experiences.

THE ASSUMPTIONS, ISSUES, & LEARNING PROCESSES

Given student populations who are both technologically savvy and working outside of their educational experience (many times working full time and attending school part-time), it comes as no surprise that there are gaps in the student’s exposure to several components that may have been taken for granted by college professors as they teach tertiary level courses. Such assumptions include ability to read academic articles, ability to learn from such reading and transfer that understanding to other contexts, ability to write a paper (beyond just knowing how to cite references correctly), being able to synthesize information from multiple sources and finally to cogently and coherently give an oral report on their efforts. These standards seem to be a myth enjoyed by professors of higher education. Indeed, it has been asserted that for at least 20 years institutions of higher education have failed to maintain college level standards (Alderman as quoted in Garner, 2009). The problem of ensuring a quality college level experience does not begin with the universities since increasing numbers of students attending do not have a strong enough background to facilitate that level of experience (Alderman as quoted in Garner, 2009; Anonymous, 2009). Indeed, those not meeting college level entrance standards can be as high as one-third of enrolling undergraduates (Anonymous, 2009).

The instructor, by taking an active learning approach to the course (Barr & Tagg, 1995; Raelin & Coghlan, 2006) and by meeting the students where they are coming from (Perserpio & Gioia, 2007; Whetten, 2007), can design a sequence of exercises that will enable students to not only improve in their writing skills but to make great gains in learning the material as well. This paper addresses these issues and responds to the call by Raelin and Coghlan (2006) on how to integrate action learning into a regular graduate degree programs.

Active Learning
Active learning approach to education has been around for some time (Barr & Tagg, 1995) and requires a shift in thinking on the part of the instructor from “What do I want to teach?” to “What do the students need to learn?” (Barr & Tagg, 1995). It takes the explicit orientation of developing students from where they currently are to what they need to be to handle the course content and material in the focal class. For most of the courses in the degree programs in colleges and schools of business, this means going beyond just developing student skill sets to actually being able to apply those skill sets to solve business problems (Garvin, 2007) which ties it to the action learning approach (Raelin & Coghlan, 2006).

This shift in orientation to active learning takes a toll on the instructor. It requires training on the part of the instructor in advanced teaching methods (Whetten, 2007; Fink, 2003) and training in how learning occurs and how “scaffolding” can be used to facilitate the development of processes and concepts (Chen & Bradshaw, 2007). “Scaffolding” is a technique which requires students to both build an understanding of a new or expanded topic area from a base previously learned and to actively seek to expand, link, refine, and reconcile these ever increasing complex models of understanding (Bell, 2002; Chen & Bradshaw, 2007; Linn, 1995).

Students who benefit from directed exploration and discovery aspects of learning (Whetten, 2007) may be stymied when as novices (or rusty learners) they are faced with a new domain. Helping provide a guided experience eases them over this hump and allows for them to have a series of “small steps” rather than one overwhelming task (Chen & Bradshaw, 2007; Light, 2001). These cannot be merely a series of activities because that will not spark the cohesiveness needed to motivate the student to excel (Debnath, Tendon & Pointer, 2007). There must be an explicit linkage among the activities for that cohesive understanding to emerge.

Yet, when embedded in a course, students also want to know that they are not just engaging in busy work but that the work will count whether towards a grade (Whetten, 2007) or towards something that they value (Light, 2001). Thus, having a series of sequenced assignments and assessments obviously related to each other but addressing different dimensions, provides a cohesive whole needed to promote deeper levels of understanding (Whetten, 2007). The many short assignments provide students with the feedback and ongoing linking to the things that they value (Light, 2001). Embedded in this effort is the assumption that taken for granted areas of education are being actively thought about and acted upon (Carson & Fisher, 2006).

In an MBA program, there is a need for advanced thinking about who they are, what they do, what the knowledge that they’ve been exposed to means and how it can be applied to their particular situation. While graduate students need to apply their personal knowledge into the work environment (Ready, Hostager, Lester, & Begmann, 2004), they also need to learn how to blend expertise across a variety of individuals in a productive team setting (Bailey, Sass, Swiercz, Seal & Kayes, 2005) to handle larger scale issues than they might otherwise be able to
address. Thus, a solution is to provide the students with a developmental experience that takes them from reading an academic article and simply reporting about it to doing a large scale integrative and applied team project based on previous individual work.

Using research and report writing as the lynchpin for the assignments has implications beyond the immediate needs of the students and provides help with a larger problem that management as an applied discipline faces; the legitimacy of our scholarly work. Students who only read summarized or pared down versions of academic papers (i.e. textbooks) never gain an appreciation for the work outside of the classroom that professors do. This is reflected in popular press articles that decry the “light” load of instructors whose only measure of value seems to be the number of students that they teach. These students thus represent a lost opportunity to educate the broader society as to the value of business scholars and their scholarly work. Assignments based on reading scholarly articles and applying them to their lives and writing up the results then allow those students to also become socialized into the discipline of management and facilitates their acceptance of scholarly work as both rigorous and practical (Russell, 2007; Svensson & Wood, 2007).

The paper next presents a case study of such an assignment used in an off site MBA organizational behavior class taught at a local military base to primarily an audience of engineers and computer programmers. These adult working students had last been in formal education anywhere from 5 to 25 years earlier. The class was part of a contracted intensive MBA program and was taught in an 8-week term. It met twice a week.

THE DEVELOPMENTAL PROJECT

Recall the main features of this set of assignments are to take them from a basic beginning point up to and through participating in an integrative applied team project. Because this set of exercises occurs throughout the entire term and is comprised of a series of deliberately sequenced assignments the total value of this set of assignments should be one that is significant to the student’s grade in the course. This sends the message that the sequence of activities is important (Whetten, 2007).

The following is a case study of a term long set of assignments culminating in an applied team project addressing an organizational behavior problem at a local company. This particular sequence of assignments totals to 50% of the course grade. There are three main parts to the set: Individual Reporting, Individual Research, and Team Project. Each of these parts has two subparts: the creation of a written assignment and the presentation of that work. The major portion of the grade resides with the written part of the assignment since engaging in writing has been shown to facilitate the learning of concepts as well as the rigor associated with academic work.
(Carter, Ferzli & Wiebe, 2007; Russell, 2007). Each of these main assignments and their components are discussed next.

**Individual Reporting**

One of the first issues mentioned earlier was that there may be some doubt as to the ability of students to both read academic articles and to apply that information elsewhere. To facilitate the student’s ability to engage in such activities is the goal of the first assignment, Individual Reporting. In this assignment, students choose an article to read from a list of articles selected by the instructor as being related to a particular chapter or concept being covered in the class. There needs to be at least one article per student (although concepts may overlap it is generally better if they are different). These articles come from peer-reviewed journals and high quality practitioner journals.

**Overview of Assignment.** While the authors and titles of the articles are found in the list provided by the instructor, actual copies of the articles are expected to be obtained by the student using an on-line article database accessed through the university’s library web page. After reading the article, the student is expected to identify three major points from the article and to link those points explicitly to concepts from the chapter associated with the article. The student is then expected to provide examples of these concepts from his or her personal experiences (on the job or off the job). The student then compiles all of this work and puts it into a memo to be distributed to classmates on the day that the student reports orally to the class on the article and his or her links to the text and personal examples. As a final engagement with the article, the student is expected to craft three quiz questions over the memo. Students then turn in digital versions of their memos and their assigned articles, as well as, printing out sufficient copies of their memo to distribute in class. When students give their oral briefing on the article they are required to simply stand up in front of their classmates and informally talk about the article, the links to the chapter and their examples. They are not allowed to read their memo or have any PowerPoint slides.

**Learning Objectives.** This assignment either refreshes or introduces the students to the following academic skills: academic reading, obtaining of articles through technology mediated sources, memo writing, summarizing and determining relative importance of material for particular audience, persuasively reporting the important material by providing links to textual material and personal experience, knowing the material well enough to just talk about it, and talking in front of a group. Stated as learning behavior objectives, this assignment has the following:
1. Introduces/Refreshes Skills

   a. Students will be able to obtain a pdf file of an academic article from an on-line article database.

   b. Students will be able to read and summarize an academic article.

   c. Students will be able to identify links to the Chapter that the instructor assigned to associate with the article and how those concepts from the chapter are linked (extend, reinforce, contradict).

   d. Students will be able to identify personal experiences that link to the article and share how they are linked to the article (extend, reinforce, contradict).

   e. Students will be able to read and understand a required writing format and apply that format to their required written memo using appropriate English grammar and spelling.

   f. Students will be able to successfully and in a timely fashion turn in a digital version of their memos and assigned articles.

   g. Students will be able to informally talk about the article and the links to text based concepts and personal experiences in front of classmates.

Preparation, Required Resources, and Supplemental Materials.  Because this assignment is linked to chapters in the textbook for the course, the instructor must choose which concepts to reinforce through the student’s efforts and identify appropriate articles (in content, length, and total number of articles). It is best if the instructor accesses the same article database that the students will have access to and verifies that the articles are there and can be obtained in a pdf format. This also allows the instructor to create (if necessary) an instruction sheet on how to access the on-line article database and to search for articles. The instructor can use screen capturing techniques to provide the students with visuals showing what the access process looks like to enable the students to verify readily if they are reaching the correct place to obtain their articles. Furthermore, the instructor needs to incorporate time into the class meeting for the students to present their articles. The number of student presenting for any particular day will depend upon the total number of students in the class section. Instructors can either set aside time every meeting for the students to present or group student presentations together right before an exam or other major review to act as a review for the topics. For this paper, the former style was chosen. Each week a new chapter was covered and the students responsible for articles related to
that chapter reported on their articles. The reason of having the report be in a memo format was to enhance the experience and learning for the student that writing for someone other than the professor facilitates (Light, 2001). It is useful to cover two process points before this assignment is due: how make persuasive logical arguments and what constitutes a good oral presentation or talk. If needed this information could reside in a supplemental handout or guided learning experience on-line.

This assignment requires the following equipment and access resources: computers with connections to the internet, word processing programs, access to a printer and email or other learning management computer package, universities/colleges with article databases such a ProQuest and Business Source Premier, and, finally, textbooks or other reading assignments for the class. All of these resources are typically found in Colleges of Business today. In addition to the basic instructions, it is a good idea to inform the students why this assignment is given. Something like the following has been used effectively in the past:

This assignment supports the student in developing life-long learning skills beyond the linking of efforts between class and the work world found in in-class exercises. This assignment refines the student’s information seeking, obtaining, translating (from academic to practitioner terms) and communication skills.

**Grading Rubric.** Grading rubrics are handy for instructors as they make explicit how points for an assignment will be awarded. They are also useful for students to know in advance as it enables students to judge how to apportion their time. For this assignment, 50% of the grade is earned with the written document and 50% of the grade is earned in the oral presentation. The 50% that arises from the written document is earned in the following manner: 15% is on using the required Memo Format; 25% is from the summary of the top three points from the article; 15% is for the identified links to chapter concepts; 15% is for identified relevant examples from the students’ professional/personal life and 30% is from three quiz questions. The 50% from the oral presentation is earned as follows: 60% is giving and not reading the talk; 30% is using the style techniques from the earlier supplemental information and 10% is for having and handing out the handouts (format and content graded in the written portion).

**Individual Research**

Some of the problems that academics and students have had with team projects can be neatly summed up in the term “social loafing” (Latane, Williams, & Harkins, 1979). Explicitly requiring individuals to prepare for a team project by first doing an individual project is one way to manage this phenomenon. For a master’s level course, our team projects tend to be applied
and, when we have working adults, the application context is usually their work environment. For the Organizational Behavior course, this means that students team up, identify and propose a solution. Most organizational behavior texts have related concepts grouped together in chapters. Since the first assignment was to read and report on an article associated with a chapter, this next developmental assignment builds from that narrowed set of concepts.

**Overview of Assignment.** Each student has the responsibility to seek out and find two more articles related to one of the concepts found in that earlier article. They are required to find articles from peer-reviewed journals that are no more than 5 years old. This means that their research paper will have a minimum of four references (their textbook, their earlier assigned article and the two newly found articles). Again, since many of these students have been away from academic writing, an explicit format is required of them for their research paper. They are given the following instructions:

There are 9 paragraphs that you must write in this assignment.

Paragraph 1: In the paper, you will begin with an introduction to the topic. What is the topic or concept that you are researching and why is this topic important? Then tell us what comes next.

Paragraph 2: This paragraph should summarize the material in the textbook on this topic.

Paragraph 3: This paragraph summarizes the material from your assigned article on this topic.

Paragraph 4: This paragraph integrates paragraphs 2 and 3 into a cohesive whole. You can use some of the material from your article memo where you made your links between the text and the article and your personal example here.

Paragraph 5: You now need to find a “peer-reviewed” article to read and summarize. (Use the same on-line search techniques that you learned in the first assignment but be sure to screen for “scholarly” or “peer-reviewed” this will help you find the academic journals. If you have any questions, email me and I’ll verify the journal for you or you can look it up in Cabell’s Directory.

Paragraph 6: This paragraph integrates the information from Paragraph 5 with your understanding of this topic that you wrote in Paragraph 4.

Paragraph 7: This is the summary paragraph for the second of the two articles that you found earlier (see Paragraph 5).
Paragraph 8: This paragraph integrates the information from Paragraph 7 with your understanding as revealed in Paragraph 6.

Paragraph 9: You will then make a conclusion about this topic that is based on your earlier work. You are encouraged to use examples from your work experience, other academic classes and/or other’s shared experiences to illustrate the points you make here.

The rest of the formatting instructions relate to limiting the length of the paper to 5 pages not counting the reference page, the style of citations and reference report to use (I prefer that they use AMJ so I have a resource guide for that up on-line). They are told to turn in digitally their research paper. They are also told to attach pdf files of their found articles to the email or bulletin board posting of their work. This helps to discourage blatant or inadvertent plagiarism. Finally, they are told to put their name, the name of their topic and the date turned in the header of their document. The students are also told that English grammar and spelling count. The following paragraph helps them understand how to screen for grammatical and spelling errors.

English grammar and spelling count. Enable all grammar checks and spelling check options in your word processing package. Run your paper through these checks. Fix any problem areas that are indicated. Then have a significant other or good friend read your work and look for additional errors. You can also wait a bit and then read your work out loud. These two methods will help you find errors that are the correct spelling but not the word that you really wanted.

In addition to doing the written paper, the students will prepare a PowerPoint presentation summarizing their paper. This presentation is geared to convincing their peers that they now have expertise in this concept area. While PowerPoint is often used as a visual aid for oral presentations, given the amount of information that is on-line these days students need either to develop those skills or build from their existing skills to better understand the material. This entire assignment is couched to the students as helping them develop expertise to do the applied term project. Thus, they have a follow-up responsibility to read each other’s efforts and comment on it to their peers and to decide which of their peers now has the skill set to help them solve a problem at work or in their personal lives. The last part of this assignment is creating a memo to send to the instructor that has four paragraphs:

Project Identification Memo Instructions

Paragraph 1: You describe your identified problem in this first paragraph. You include how you will apply your newfound expertise.
Paragraph 2: You choose a potential teammate and provide a summary of that person’s expertise. You need also to include why that person’s area of expertise is appropriate to help solve the identified problem.

Paragraph 3: Here, you identify your second choice of a teammate and that classmate’s newly developed expertise. Again, include why that person’s area of expertise is appropriate to help solve the identified problem.

Paragraph 4: Finally, you indicate your third choice of a teammate and that classmate’s newly developed expertise. Remember to again why that person’s area of expertise is appropriate to help solve the identified problem.

Learning Objectives. As mentioned earlier, this assignment builds on the previous Individual Reporting assignment. It has the following categories and specific learning objectives of:

1. Reinforcement of Earlier Skills
   a. Students will access the on-line article database.
   b. Student will translate information from earlier Article Memo into new format.
   c. Student will continue to link together explicitly the concepts, academic writing, and personal experiences.
   d. Students will read and follow formatting instructions.
   e. Students will again use a memo format to communicate their understanding of a problem/issue and who might be able to help them address that problem.

2. Extends Previous Skills
   a. Students will find two articles using concept information and screening for peer-reviewed journals.
   b. Students will evaluate each other with respect to a particular applied problem that needs to be solved, as well as, to good communication skills.

3. Introduces/Refreshes New Skills
   a. Students will correctly use citation formats and reference formats.
   b. Students will develop an on-line PowerPoint presentation detailing their individual research paper.
   c. Students will critically evaluate each others’ presentations.
   d. Students will identify a problem or issue in the workplace that can be addressed using their concept and the concepts of up to three other classmates.

Preparation, Required Resources, and Supplemental Materials. The same resources are required as for the first assignment with a couple of additions. Students need to have access to PowerPoint or other presentation computer programs and students need access to someplace to
publicly post their work so that other students can view it and comment on it. The best sort of area is within a Learning Management System like Blackboard, Moodle, Web-CT or the like which restricts access to only the students in the class. Again, it is a good idea to communicate to the students why this assignment is given. Something like the following has been used effectively in the past:

This is another more advanced way of embedding what is learned in the MBA curriculum and this course in particular in the “real world”. This assignment requires more advanced knowledge and learning levels than the earlier assignments which really only required advanced undergraduate learning skill levels. For this paper, the individual student takes any topic addressed in the chapter related to their earlier article, finds, reads and integrates two more articles and comes to a new synthesized understanding about that topic.

**Grading Rubric.** This assignment is worth 40% of the total developmental sequence. One hundred percent of the credit for this assignment is earned as follows: 45% for the 9 paragraphs with the correct content and assessed for quality as well; 5% for each of the following—met length requirement, met formatting requirement, reference page correctly done, the correct 2 pdf files attached, paper digitally turned in, interesting and evidence of strong synthesis, and the posting of PowerPoint to public area; 3% for having a title page in the PowerPoint; 9% for having a slide for each paragraph in the paper; and a final 8% for posting comments on classmates’ postings and submitting the bidding memo to the instructor. This paper is generally due at the middle of the term. Late papers are severely penalized given the reliance of other students on the completed efforts.

**Team Project**

This is the last assignment in the developmental project. Where the first assignment introduced students to skills and resources that they would need to successfully complete the course and the second assignment refined those skills and focused in on a particular expertise area of the student’s choice but limited to the concepts found in the first article or chapter, this last assignment brings together multiple students, their associated expertise, and allows them the opportunity to identify where their skills can be used and to actually use their skills in proposing a resolution to an issue or problem found in a “real world” environment. Thus, this last assignment requires students to work together in teams to address a typically ill-defined problem using the skill sets that they’ve learned and refined over the semester. It represents the assessment of their learning for the course.

**Overview of the Assignment.** From the earlier bids, teams of approximately three people are formed. The smaller team size facilitates coordination issues for the students and reduces the likelihood of social loafing. Building the applied project around the set of expertise needed to
resolve the identified issue or problem also helps manage social loafing. After receiving their
group assignment, the teams vote on which problem to address. After discussion on the problem
and its write up, the students will combine their earlier work into a single document and find
papers linking together their individual areas of expertise so that all linking combinations are
present (A↔B, B↔C, C↔A). Each student is responsible for finding one of the linking articles.
They then combine all of this new information into their report and craft suggestions on how to
solve the problem/issue using this new synthesized understanding. After crafting their report,
they then create a display that communicates the problem, their expertise areas, their propose
solution and why it should work. This display is meant to be in the fashion of a convention booth
and can use “old” technology (Science Fair Boards, etc.) and/or “new” technology (a continuous
repeating PowerPoint presentation that includes sound). Each student should be prepared to
present their project and to defend it to the “general” public (i.e. their classmates, their instructor,
and any clients from the workplace who can make it).

Again, a specific format is given to the students to show them how to integrate their separate
efforts. This format allows for either Paragraphs or Sections depending upon the detail to which
the team needs to go to address the problem/issue. All of the earlier formatting issues and
cautions are repeated.

There are 15 paragraphs that you must write in this assignment.

Paragraph/Section 1: Begin with an introduction to a problem, issue, or circumstance
that requires all of the topics.

Paragraph/Section 2: Summarize the material from Member 1 and relate it to your
identified problem/issue.

Paragraph/Section 3: Summarize the material from Member 2 and relate it to your
identified problem/issue.

Paragraph/Section 4: Summarize the material from Member 3 and relate it to your
identified problem/issue.

Paragraph/Section 5: Summarize the material from Member 4 and relate it to your
identified problem/issue or go directly to Paragraph/Section 6 if no Member 4.

Paragraph/Section 6: Summarize your understanding of how to address this problem
given Paragraphs/Sections 2 through 5.

➤ You will then need to see if there are any system effects/issues that you will need to
address/consider as you attempt to resolve your problem.

Paragraph/Section 7: Find and Summarize Peer-Reviewed article A↔B.
Remember that the article database is a useful resource here and that you will have to include the PDF file of any article referenced in this report in your appendix to your report.

Paragraph/Section 8: This paragraph integrates the information from Paragraph/Section 7 with the earlier understanding reported in Paragraph/Section 6.

Paragraph/Section 9: Find and Summarize Peer-Reviewed article B↔C or a second B↔A if only two team members.

Paragraph/Section 10: This paragraph integrates the information from Paragraph/Section 9 with the earlier understanding reported in Paragraph/Section 8.

Paragraph/Section 11: Find and Summarize Peer-Reviewed article C↔D or C↔A if only three team members.

Paragraph/Section 12: This paragraph integrates the information from Paragraph/Section 11 with the earlier understanding reported in Paragraph/Section 10.

Paragraph/Section 13: Find and Summarize Peer-Reviewed article D↔A or go to Paragraph/Section 14 if less than four team members.

Paragraph/Section 14: This paragraph integrates the information from Paragraph/Section 13 with the earlier understanding reported in Paragraph/Section 12.

Paragraph/Section 15: The paper concludes with a suggest solution to the problem/issue and its implementation.

You are encouraged to enhance your persuasive efforts with additional work examples, examples from other academic courses, and/or other’s shared experiences.

Learning Objectives. Again there are the three categories of learning objectives for this culminating exercise. Please note that with an organizational behavior class, class time was spent on what it meant to have effective teams, interpersonal communication skills, how to hold effective meetings, how to monitor yourself and others, how to design a project or work flow,
etc. If your class does not include these topics and the students haven’t had organizational behavior (OB) yet, you may want to provide supplemental material in these areas. The learning objectives for this assignment are:

1. Reinforcing Earlier Skills
   a. Students will transition previous research papers into a single paragraph or section.
   b. Students will find supplemental articles that link two of the concept areas and report on those articles using the skills learned earlier.

2. Extends Previous Skills
   a. Students will take oral presentation skills and visual presentation skills to create a convention booth display of problem, resources and solving of problem.
   b. Students will apply team, communication and planning skills learned during in-class exercises/lectures to ill-structured “real world” problem.
   c. Student will critique each others’ convention booths.

3. Introduction/Refreshing of Skills
   a. Students will translate research into action and suggest potential solutions that reinforce/align with their research.
   b. Students will evaluate each other as team mates according to criteria from in-class work.

Preparation, Required Resources, and Supplemental Materials. This assignment is based on students’ work life experiences. If you have a class without current work experience you may have to identify appropriate problems in the university or service project for the community for the students to work on. The same general set of requirements are needed. Some supplemental materials on effective teams, interpersonal communication, planning processes and computer programs, and the like may facilitate the process if not in an Organizational Behavior course. The instructor will need to receive and read the “bids” from the students in a timely fashion so that the teams can be created and reported back to the students. Teams of 3 are best. Teams of 2 or 4 may be used if absolutely necessary. The instructor may post the listing of the teams on the Learning Management System and/or announce it in class.
Grading Rubric. This assignment is worth 45% of the total developmental sequence. One hundred percent of the credit for this assignment is earned as follows: 55% for the 15 paragraphs with the correct content and assessed for quality as well; 3% for each of the following (18% total)—met length requirement, met formatting requirement, reference page correctly done, the correct pdf files attached, paper digitally turned in, interesting and evidence of strong synthesis., 12% for the comprehensiveness and uniqueness of their booth, 10% for their response to questions asked by peers, faculty and clients during the “Solution Fair” and a final 5% for peer evaluations of team members. This project is generally due during finals week. Late projects are severely penalized due to other students relying on their presentation and it late term due date.

IMPLEMENTATION EFFORTS

This project has successful been used in two scheduling formats within the MBA program used earlier. Remember, it was taught in a cohort fashion for working professionals off the main university site and usually co-located at the work campus of the individuals. The course was an introductory management class in the MBA program; specifically a general Organizational Behavior course. The prerequisites for the class were admission to the program (hence an undergraduate degree, GMAT score, basic computer skills and basic reading, speaking and writing in English skills). This course was supported by a Learning Management System (Web-CT). The two schedules were a compressed 8-week program and a full 15 week program. The only developmental project change made was to move from a simple requesting of people to have on one’s team to a justification vis-à-vis a specific project as to why one wanted someone on one’s team.

During the first cohort group, team formation was difficult and some people were upset that their requests were not able to be honored. Despite this, the class rose to the occasion and performed their work well. One student, recently promoted to a supervisory position sent an email to the MBA director thanking the MBA director for the course,

Thanks to … the large amount of resources (notes and articles) provided and to the high expectations set upon us to engage on related organizational behavior research, I found myself, my subordinates and the people I deal with benefiting from this exposure and learning. I am thankful and amazed because, the concepts covered by this academic course were so practical that their benefits were recognized by both subordinates and higher ups.

During the second cohort group, team formation went much more smoothly. Teams operated well and again produced high quality projects that were of practical use at the work sites. The instructor received an average 4.5 on teaching evaluations for the course (on a scale ranging from a low 1 to a high of 5).
CONCLUSION

Using the active learning orientation to craft the experience met and exceeded the participating instructor’s expectations with regards to student learning and even was reflected as valuable in student evaluations. While one cannot generalize from such a small “n”, you as the reader can decide if you can use the assignments and results that were described here. While this particular set of uses required minimal research (only 5 peer-reviewed articles read by any one student), it could easily be adjusted upwards for a more research oriented program or downwards for an undergraduate experience.

If your students have difficulty in creating a logical presentation, there are several critical thinking or logic development books and booklets available. It is highly recommended to find an appropriate one and use it repeatedly as a reference tool for the in class work. One way of helping the students extend its use to their papers is to require them to use a formal logical assessment of each others’ work as they bring together their team project report. A simple format used repeatedly seems to have the most effective response. Quinn (Quinn et al., 2003) has a simple logic format in the introduction chapter of his textbook, On Becoming a Master Manager, which was successfully used in this case illustration. Quinn suggests using a three fold criteria…your conclusion or answer or proposition (the claim) must be supported by quality evidence (the grounds) and you must be very specific about how that evidence supports your claim (the warrants). He uses the order of claim, warrants, and grounds.

The high expectations for these working adults in conjunction with the explicit support on how to proceed helped these students not only to get up to speed but to really engage with the content and “own” it in ways that previous class exercise or case based efforts had not. The often overwhelming tasks involved in library research and then in application to a real world setting, were made manageable for the students with the explicitness of the format. The set of intermediary milestone assignments helped the students in their time management since their previous experiences either were long ago or hadn’t been developed in this area.

Whetten (2007) was right in his observation of wishing that “I knew when I started what I now know with respect to a learning orientation in my classes coupled with an action based projects”. This developmental sequence is highly recommended to those with students who may be weaker or who need a refresher on the academic process. It resulted in greater rigor and in introducing the students on how, in a practical fashion, to include academic rigor in their life-long learning skills.
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WHEN PROJECT FAILURE IS A SUCCESS: AN EXPERIENTIAL APPROACH IN THE CLASSROOM

Janis Warner, Sam Houston State University, JAW022@shsu.edu
Qiannong Gu, Sam Houston State University, qgu@shsu.edu
Michael Glissmeyer, Sam Houston State University, mdg012@shsu.edu
Pamela J. Zelbst*, Sam Houston State University, MGT_PJZ@shsu.edu
*Corresponding author

ABSTRACT

An experiential learning approach based on Bloom’s Taxonomy was adapted to help business graduate students gain insight into Radio Frequency Identification (RFID) technology while covering the various classroom topics. Two graduate classes are compared, one class experienced a failed RFID project and the other experienced a successful RFID project. The projects were designed so students would learn about product design, process design, teamwork, resource scheduling, inventory planning, control, and project management. Although the first project failed because of the damage of a critical component, we found that there is no difference on student learning as defined by Bloom’s Taxonomy.

Keywords: RFID, Experiential Learning, RFID Education, RFID Projects, Bloom’s Taxonomy

INTRODUCTION

Experiential learning affects the student’s ability gain and retain information (Dewey, 1938). According to Dewey (1938, pg. 37) “every experience affects for better or worse the attitudes which help decide the quality of further experiences……….every influence affects in some degree the objective conditions under which further experiences are had.” This statement leads educators to wonder if the success or failure of a classroom project impacts learning in the classroom.

According to Zelbst, Sower and Green (2008) technologies such as Radio Frequency Identification (RFID) cannot be sufficiently understood through the traditional lecture class. Further these researchers find that experiential learning will not only lead to a better understanding of RFID technology but also a deeper understanding of other associated topics such as process design, product design, team work, and project management.

Colleges of business have very few experiential learning experiences for students making it difficult if not impossible for students to understand the material covered (Pfeffer and Fong, 2002). Pfeffer and Fong (2002) feel that business schools should model themselves more closely with professional schools in terms of teaching to be effective in transferring knowledge to our
students. According to Li, Greenberg and Nicholls (2007), colleges of business are facing pressure from primary stakeholders to focus greater attention on experiential learning. Extrapolating from this information it can be inferred that both students and businesses those students will work for in the future want college courses to incorporate an experiential component.

One of the disadvantages of adding an experiential learning component to the classroom is the number of hours added to a faculty member’s already busy schedule (Li, Greenberg and Nicholls, 2007). Despite this disadvantage, many educators are calling for a change in classroom teaching methodologies (Li, Greenberg and Nicholls, 2007; Dieleman; 2006; Pfeffer and Fong, 2002; Kayes, Kayes and Kolb, 2005). Dieleman (2006) identifies that there is a need for a paradigm shift in the teaching effort by adding to their educational philosophy through the use of experiential learning. Using a real project to teach project management is challenging for not only the students but also the professor because if any part, even just a minor part, of the project goes wrong, the whole project may fail at the end. Therefore, the instructors are usually apt to make the demo project as simple as possible. At Sam Houston State University, we use two RFID projects as examples to demonstrate the principles of project management to MBA students in College of Business Administration.

RFID technology was chosen for the projects for both classes because the technology has been identified as “the 10th most innovative technology of the past 25 years” (Spiegel, 2005, p. 60). Business students need to develop an understanding of this technology and the implications the technology has for business in the future (Zelbst, Sower and Green, 2008).

The purpose of this research is to assess two graduate class projects using Bloom’s Taxonomy to identify whether there are differences in learning between a successful classroom project and an unsuccessful classroom project. A discussion of RFID Technology and a Literature Review with discussion of Bloom’s Taxonomy and Experiential Learning follows. The methodology employed in the classroom is then described followed by a discussion of the results from reflective essays written by the students engaged in classroom RFID projects in terms of Bloom’s revised taxonomy. Finally, conclusions, implications and limitations are discussed.

1. Literature Review

Bloom’s Taxonomy

As the Associate Director of the Board of Examinations of the University of Chicago, Benjamin S. Bloom initiated the development of a framework to measure the cognitive domain of educational objectives. The development of the taxonomy included a group of measurement experts from the United States that met twice a year from 1949 to 1956 when the final draft was published under the title, *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain* (Bloom, Engelhart, Furst, Hill, &b
The main purpose of the taxonomy was to provide a framework for classifying expected learning results and their measurement, thereby facilitating communication and the creation of measures for each learning objective. In addition, Bloom believed the taxonomy could provide a common language about learning objectives, a means for determining the extent of agreement between broader educational objectives and individual course assessment, and a broad view of educational goals against which any specific course or curriculum could be compared and gauged. The taxonomy included the carefully worded definitions of the following six cognitive domain categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. Those objectives/outcomes classified in the middle categories from Comprehension to Synthesis are typically considered to be the most important goals of education (Krathwohl, 2002).

Learning objectives may focus on any one of the domains with the domain categories building sequentially through levels of learning that have been categorized from a low level to a high level. Thus, the higher the level of learning, the more complex and abstract the educational experience is with the mastery of a simpler domain seen as necessary for mastery of the next category. The following is an overview of each category with verb examples that represent the intellectual activity on each level.

**Knowledge**
Knowledge, the simplest of the learning categories is composed of three subcategories - 1) knowledge of specifics; 2) knowledge of ways and means of dealing with specifics; and 3) knowledge of universals and abstractions in a field (Krathwohl, 2002). Action words associated with this category include memorize, name, recall, recognize and repeat (reference here from Chan's list). For example, the student can recall previously learned material such as valid definitions or specific facts. All that is required is the repetition of appropriate information (Athanassiou, et al., 2003). These actions signify behaviors that indicate a literal understanding (Betts, 2008).

**Comprehension**
Comprehension builds on knowledge indicating an understanding of what the material means (Athanassiou et al., 2003). It is composed of three subcategories: 1) translation; 2) interpolation; and 3) extrapolation (Krathwohl, 2002). Action words for this category include describe, explain, identify, review and translate (Reference here). Activities that indicate comprehension level attainment include comparing, contrasting and summarizing (Athanassiou et al., 2003).

**Application**
Application is part of a medium level of thinking where students exhibit behaviors that require the knowledge they have learned to be used in a new way and/or that the learned knowledge is broken down into component parts (Betts, 2008). Action words used to describe
these behaviors include apply, demonstrate, interpret, illustrate and solve (reference here). Reaching this level of thinking shows the student can use learned material to answer a question or solve a problem in a new environment (Athanassiou et al., 2003).

**Analysis**

Analysis is a second category at a medium level of learning and is made up of three subcategories: 1) analysis of elements; 2) analysis of relationships; and 3) analysis of organizational principles (Krathwohl, 2002). Activities indicating the analytical level of thinking are based on the student’s ability to break down the material into its components and show an understanding of its content (Athanassiou et al., 2003). Action words used to describe this level of thinking include appraise, compare, contrast, differentiate, distinguish and examine.

**Synthesis**

The first of two high level of learning categories, synthesis has three subcategories to help identify the behavior: 1) production of a unique communication; 2) production of a plan, or proposed set of operations; and 3) derivation of a set of abstract relations (Krathwohl, 2002). Creative behaviors such as recombining parts to form a new entity signify attainment of this level of cognitive development (Athanassiou et al., 2003). Action words for this category include compose, construct, design, develop and formulate (reference from Chan).

**Evaluation**

The highest cognitive domain is evaluation and reflects the ability to make decisions, selections and judgments about the value of knowledge for a particular context (Athanassiou et al., 2003). The subcategories deal with: 1) the evaluation of knowledge in terms of internal evidence; and 2) judgments regarding external evidence (Krathwohl, 2002). Action words used for this category include appraise, assess, compare, judge, select and value. The behaviors for this category focus on combining various knowledge components into a new whole or assessing the value of the knowledge for a different context (Betts, 2008).

**Experiential Learning**

Kolb (1984, P. 41) defines experiential learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience.” Kolb and Kolb (2005; p. 194) extended this definition by stating that experiential learning is “a process of constructing knowledge that involves a creative tension……that is responsive to contextual demands.” Extrapolating from this information students should gain and retain knowledge in classes that include experiential learning experiences in relation to the topicality of the class (Zelbst, Sower& green, 2008; Kolb, 1984).

Kolb (1984, p. 4) states that experiential learning is a process that integrates or links education, work and personal development. An experiential component in the classroom allows the student
to be “….directly in touch with the realities being studied…..,” (Keeton and Tate, 1978, p.2). Bringing an experiential component to the classroom involves direct encounter with the topic students are studying rather than merely hearing and thinking about the topic (Keeton and Tate, 1978, p.2).

The traditional classroom lecture environment in the classroom is no longer enough for students (Alic, 2008). Students as well as the companies these students will work for are pressuring colleges of business to focus greater attention on experiential learning (Li, Greenberg and Nicholls, 2007). Colleges of business have very few opportunities for experiential learning (Pfeffer and Fong, 2002). The inclusion of an experiential component, such as an RFID project that engages the students in the learning process, should result in students gaining more from classes (Zelbst, Sower and Green, 2008).

**RFID Technology**

Radio Frequency Identification (RFID) is one of Automatic Identification and Data Capture (AIDC) technologies. RFID technology uses the electromagnetic and electrostatic coupling in the radio frequency portion of the electromagnetic spectrum to transmit signals. It is similar to barcode identification technology for tracking the materials through the transaction processes. The first application of RFID can be traced back to World War II by the allies to identify aircraft as friend or foe. Recently, RFID is being adopted in supply chain management to improve the effective and efficiency of inventory tracking and management. On June 2003, Wal-Mart issued a mandate to its top 100 suppliers to attach RFID tags to cases and pallets by January 2005. U.S. Department of Defense (DoD) also requests RFID tags in the contracts issued after October 2004.

Due to the nature of the technology, RFID has some unique advantages over others with the same functionality. RFID tags can be read without a line of sight or any physical contact. The data can be written and stored in RFID tags. Several tags can be read simultaneously (Lahiri, 2006). Therefore, the application of RFID can increase inventory visibility and reduction in inventory and working capitals. It will lead to a more efficient use of labor and reduce loss, scrap, shrinkage, waste and rework (Accenture Report 2004, Bearing Point Report 2005). AT Kearney Consulting (2003) estimates retailers will benefit from the adoption of RFID by 5% inventory reduction, 7.5% labor and costs reduction in stores and warehouses, and a reduced stock-out cost of as high as 7% of revenues.

RFID technology can also be integrated at the supply chain level for more efficient information sharing. Chuang and Shaw (2005) divide RFID integration in supply chain into three stages: functional integration (Stage I), intra-company integration (Stage II), and inter-company integration (Stage III). Most current applications of RFID fall into stage I. However, more benefits are expected to be derived from the applications in stage II and III (Accenture Report 2004, Dining and Schuster 2004). Some researches have studied how to integrate RFID
information into the business decision-making process (Gaukler 2007, Heese 2007, Lee and Ozer 2007). As a promising technology, RFID has drawn extensive attention from both academia and practitioners.

Teaching RFID in classroom exposes business students to an innovative technology with the up-to-date information. Students will have hands-on experience with the technology as well as learning about project management, product design and process design. In fact, the lack of understanding the technology and the expected benefits for managers delays the implementation of RFID in practice.

2. Methodology

Students in two graduate classes were engaged in a class project focused on RFID technology. Both classes were taught by the same instructor in back to back semesters. One of the projects was to build an RFID controlled doggie door. This project is referred to as the Phideaux Project. (See Figure 1). The second project was building a smart self (See Figure 2). The same approach to the project was used in both classes and will be described using Bloom’s taxonomy next.

Classroom Process

Knowledge

Graduate students engaged in both the Phideaux project and the Smart Shelf project were both exposed to RFID technology using lecture and articles. Lectures in both classes covered the history of the technology, how the technology works, and the importance of the technology. Articles given to both classes covered typical uses of RFID technology. This exposure allowed student to be able to name, recall, recognize, and repeat information about RFID technology.

Comprehension

Once the graduate students from both classes were introduced to the technology, they were then introduced to the projects of building a RFID controlled doggie door and a RFID enabled smart shelf. This step allowed the students to begin building on the knowledge that they had gained about RFID and translating it to their respective projects. Students were then given a written description of the project and asked to read the information before the next class.

Application

Students in both classes were then engaged in discussion about the process of building the doggie door and smart shelf. The students were asked to identify the process for the operation of the doggie door and the smart shelf as well as the design of both projects. This step allowed students to exhibit behaviors that required knowledge they had acquired to be used.

Analysis

Students were asked to analyze the elements of the respective projects and identify various relationships by developed a work break down structure for the projects. By creating the work break down structure students had to not only the activities involved in completing their projects but also the precedence of those activities.
Synthesis

After the work breakdown structure was prepared the students were asked to develop their plan of action and a schedule of work. The student on both projects had to design, develop and compose their respective plans and then execute the plans to achieve their objectives.

Evaluation

Finally the graduate students in both classes were asked to write a reflective essay evaluating the project in terms of what the individual students had learned. The professor asked students to talk about what they learned during this process whether it was directly or indirectly related to the respective projects. In addition the students were asked to identify any new uses they could think of for RFID technology.

Summary

Although the students were from two different classes the projects the students engaged in utilized the same technology and parts. Students in both classes built RFID readers, the difference in the two projects was for the end use of the deliverable of the project. The classroom process was the same in both projects from beginning to end. The instructor was the same for both classes. The end result for the projects was that the Phideaux project failed and the RFID enabled smart shelf was successful in terms of the end product.

1. Evaluation Process

Students in both the class with the failed project and the class with the successful project were required to write reflective essays at the end of the semester. Three raters with backgrounds in experiential learning and classroom projects were chosen to evaluate the reflective essays based on Bloom’s Taxonomy. The raters were independent of classroom instructor. Further, these raters met and trained to make sure all raters were consistently applying Bloom’s Taxonomy. Raters individually rated the students reflective essays in each class, then met and identified differences in rating. Where differences occurred the raters discussed the reflective essays in relation to Bloom’s Taxonomy and came to a consensus.

2. Discussion

Analysis

Graduate students working on the doggie door project had an average of 4.533 (See Table 1), meaning that although the project was not successful (the doggie door was not functional). The average indicates that the class as a whole reached the level of analysis and began to ascend to the level of synthesis according to Bloom’s Taxonomy.
Table 1
Graduate students working on the smart shelf project (a successful project) had an average of 5.0625 (See Table 2). The average indicates that the class as a whole reached the level of synthesis according to Bloom’s Taxonomy.

Table 2
One possible reason the graduate students were slightly higher could be that there were four students that were in both classes. When those four students are taken out the average of the class was 4.8333 (See Table 3).
Table 3
The data from graduate class engaged in the doggie door project included one outlier. One student was not engaged in the project and did not make an effort to participate. When the outlier is removed the average for that class becomes 4.876 (See Table 4).

Table 4
The data indicates that when adjustments are made for the outlier in the graduate class engaged in the doggie door project and the four overlapping graduate students in the smart shelf project there is no difference. Engaging graduate students in experiential learning seems to move them from the knowledge, comprehension, and application levels of Bloom’s Taxonomy to the levels of analysis and synthesis levels.
CONCLUSIONS, LIMITATIONS, AND IMPLICATIONS

This research compares the students’ learning results from two project-oriented graduate Operations Management classes. The project in first class is failed because of the damage of a critical component, while the second one was successfully completed. By using Bloom’s Taxonomy to evaluate the students’ reflective reports, we found that

1) There is no evidence showing the difference on students’ learning in two classes. The average learning level achieved in the first (failed) project is 4.53 with a standard deviation of 1.51, while the second project has an average of 5.06 and standard deviation of 1.39. However, there are four repeat students in both classes. The class average and standard deviation are 4.83 and 1.53 respectively after remove repeat students from our consideration in the second class. The small residual difference (0.3) between two classes can also be partially explained by the influence of repeat students on the remaining of the class.

2) Our results also showed that a failed project may lead students to a higher learning level because they maybe willing to find out the cause of failure. In the failed project, twelve out of fifteen (80%) students achieved at least level 4 (out of 6) in learning defined by Bloom’s Taxonomy. While, only nine out of twelve (75%) students achieved at least level 4 in the successful project without consideration of 4 repeat students.

3) The results from this research would suggest instructors who are planning to adopt a project for teaching purpose that they can pick up a project fit to the subject best regardless the difficulty of completing the project to some extent. The students will learn the most from the process other than the results alone.

The small sample size of this study is a limitation. Further a survey should be developed and validated to empirically test the findings. Finally there were four students that were in both classes, the overlapping students could be a source of some bias.

Prominent 20th century scholars have given experience a central role in the theories of learning including John Dewey, Kurt Lewin, Jean Piaget and Carl Jung (Kolb & Kolb, 2005). The experiential learning theory (ELT) (Kolb, 1984) which draws on their work looks at learning as “a holistic process of adaptation to the world...[resulting] from synergistic transactions between the person and the environment” (Kolb & Kolb, 2005, p. 194). Recognizing that education as traditionally delivered is not enough to maintain economic competitive advantages in the currently evolving global economy it is argued that experiential learning, which emphasizes the person/environment interaction, is an important missing component (Alic, 2008). The experiential learning cycle – concrete experience, reflective observation, abstract conceptualization and active experimentation (Kolb & Kolb, 2005) or simply experience, reflect, think, act - provides the framework for moving to higher levels of learning. As students move through the experience and reflect stages of experiential learning, they “draw connections
between their reflections, integrating their thoughts about what they have experienced as a stimulus for learning, development, and change” (Kentworthy-U’ren & Peterson, 2005, p.276)

With many students entering higher education conditioned by their prior experience to be passive recipients in their learning process (Kolb & Kolb, 2005), a need for experiential learning in higher education is evident (Alic, 2008). “Making space for students to take control of and responsibility for their learning can greatly enhance their ability to learn from experience” (Kolb & Kolb, 2005, p.209). Our findings support previous research (references here) that has found a need for more experiential learning in business education.

Educators might well be concerned that they can not guarantee the successful outcome of any particular project since experiential learning projects outcomes are not predetermined. This concern might lead to experiential learning project avoidance. Interestingly, our findings indicate that the outcome of the project itself, success or failure, does not matter when it comes to the successful attainment of higher knowledge levels. (Put a reference to the results here). This evidence supports the idea that even failure is success when it comes to experiential learning.

Future Research

In addition to a more successful learning experience in terms of level of knowledge attainment, experiential learning provides an opportunity to reconnect students to their community when the projects are service learning projects. Service learning has been defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (Jacoby, 1996, p.5) Thus, experiential learning incorporating civic engagement projects can provide a dual purpose as a step towards the larger goal of service learning. The use of service learning in business education has been seen as a tool to resolve the fundamental challenge of how to mix academic rigor with practical relevance (Godfrey & Berry, 2005). The dual purpose learning outcome possibility is a potentially important avenue for future pedagogical development.

References


Figure 1.
Biographical notes:

Janis Warner is a Ph.D. from Florida Atlantic University and is an Assistant Professor of Management Information Systems at Sam Houston State University. She has presented her research at conferences including America’s Conference on Information Systems, Decision Sciences Institute, Association of Business and Behavioral Sciences and International Association for Computer Information Systems.

Qiannong Gu is an Assistant Professor of Operations and Supply Chain Management at Sam Houston State University. He received his first Ph.D. in Manufacturing Systems from Florida Atlantic University and the second Ph.D. in Operations and Supply Chain Management from University of Houston. His research interests include supply chain contract modeling, RFID implementation in information sharing, and facility location.
Michael Glissmeyer ………

Pamela J. Zelbst is a Ph.D. from University of Texas at Arlington and is an Assistant Professor of Management at Sam Houston State University. Her research has been presented at conferences including Decision Sciences Institute, Southern Management Association, Southwest Academy of Management, and Western Academy of Management. Her research appears in the Journal of Behavioral and Applied Management, Industrial Management & Data Systems, Journal of Business and Industrial Marketing, and International Journal of Innovation and Learning.
SERVANT LEADERSHIP IN LEARNING ENVIRONMENTS

Travis P. Searle, University of Nebraska, searle.travis@huskers.unl.edu

ABSTRACT

The leadership role within the learning classroom is beginning to be recognized by academia. This leads to the question: What type of leadership is best suited for the learning classroom? One positive form of leadership known as servant leadership is focused on the development and growth of their followers. This paper proposes a model that suggests servant leadership as an ideal form of leadership for the learning classroom. Two possible antecedents of servant leadership are suggested (i.e., incremental self-theory and mastery goal orientation), along with two outcomes of servant leadership within the learning classroom (i.e., an increase in followers incremental self-theory and mastery goal orientation), which then will lead to an increase in learning in the classroom.

Teachers in learning environments assume many different roles. One implicit role, which teachers assume is that of a leader (Crowther & Olsen, 1997; Frost & Harris, 2003). A leader is often seen as someone with a capacity to influence others challenging processes (i.e., goal attainment) (Hughes, Ginnett, & Curphy, 1993; Yukl, 1998). Whether the teacher is an elementary school teacher, middle school teacher, high school teacher, university teacher, or a teacher/trainer in a business organization all teachers influence their students in the through the difficult process of learning. Thus, the implicit role of leader, which teachers currently have, should become more explicitly recognized (Kent, 2001; Harris, 2005).

Teachers lead and influence others through the difficult and challenging task of learning. Only recently has academia begun to recognize the leadership role that teachers have within the classroom (York-Barr & Duke, 2004). Historically, teachers have been seen as leaders outside of the classroom, such as, a teacher who becomes a superintendent or principal, a teacher who becomes the head of curriculum in the district or school, or a teacher that assumes any other type of administrative role outside of the classroom (Harris, 2005). However, the leadership style required to lead individuals in the learning classroom is not fully understood, nor recognized. This leads to the question: What type of leadership is best suited for the learning classroom?

An effective leader in learning environments must have a belief system that recognizes that intelligence is malleable and changeable. This type of belief system has been labeled as an incremental self-theory (Dweck, 1999). This incremental self-theory allows a leader to be fully invested in guiding, facilitating, and inspiring their followers to greater intellectual development (Heslin, Vandewalle, & Latham, 2006). An effective leader must also have the capacity to instill this belief system into their followers. They must be follower centered.
One possible style of leadership that is uniquely conceptualized to be relevant to learning environments is servant leadership (Bass, 2000; Smith, Montagno, & Kuzmenko, 2004). Servant leaders are governed by their values, principles, and beliefs systems (Avolio, Walumbwa, & Weber, 2009; Farling, Stone, & Winston, 1999). One belief that is paramount to a servant leader is the belief that their followers can learn, develop, and grow (Bass, 2000; Graham, 1991). Servant leaders are known as people builders, rather than people users (Greenleaf, 1977). It is possible that this belief in the development of their followers stems from the servant leaders incremental self-theory. Thus, having an incremental self-theory seems like a logical antecedent to servant leadership. This belief in the malleability of intelligence may also enable servant leaders to foster this incremental self-theory in others, which will lead to greater achievement within the learning classroom. This belief in the malleability of intelligence and the ability to foster its development in their followers is what may make servant leadership an ideal form of leadership for the learning classroom.

This paper will first outline servant leadership. Then it will propose propositions that suggest an antecedent to servant leadership is a belief in the malleability of intelligence. This will be followed by propositions that suggest a servant leader can foster the belief that intelligence is malleable in their followers, which will lead to increased learning within the learning classroom.

Servant leadership

The notion that a leader should be a servant has been talked about and re-packaged for centuries. One of the earliest notions of servant leadership was suggested by Lao-tzu an ancient Chinese sage who lived in the sixth century B.C. who remarked “enlightened leadership is service, not selfishness” (Tzu, 1985, 69). Centuries later Jesus Christ modeled and taught that leaders should be servants (Sendjaya & Sarros, 2002). More recently a business practitioner named Robert Greenleaf has written about the need for leaders to be servants first and leaders second (Greenleaf, 1977). The term servant leadership has stemmed from his writings.

A servant leader is a charismatic moral individual (Graham, 1991) who is focused on the welfare of their followers, and striving to help their followers develop, learn, and grow (Liden, Wayne, Zhao, & Henderson, 2008, Greenleaf, 1977; Mayer, Barde, & Piccolo, 2008). Servant leaders are concerned with bringing about positive change in individuals, organizations, communities, and society (Liden et al., 2008). A servant leader believes this positive change is brought about through serving their followers, and helping their followers fulfill their highest needs (Greenleaf, 1977). This caring positive form of leadership is seen as relevant to business organization, education organizations, foundations, and churches (Spears, 1995). In contrast, other forms of leadership are not as solely focused on the needs, autonomy, and positive development of their followers as a servant leader is (Graham, 1991; Smith, Montagno, & Kuzmenko, 2004; Stone, Russell, & Patterson, 2004).

In the academia field, servant leaders have struggled in conceptualizing the ideas of Robert Greenleaf in a manner that lends itself to empirically testing. Early attempts of
conceptualizing servant leadership most often led scholars to trying to conceptualize servant leadership by reviewing the literature, and then suggesting long lists of characteristics of servant leaders (Patterson, 2003; Russell & Stone, 2002; Spears, 1995) without empirically testing their conceptualization of servant leadership. These prolonged conceptualizations of servant leadership led some to question the validity of servant leadership (Bass, 2000; Bowman, 1997).

Other scholars have felt the intuitive appeal of servant leadership and have tried to introduce the long list of characteristics of a servant leader into their respectful disciplines. Scholars have suggested the relevance to servant leadership in the service oriented businesses (Pollard, 1996), family businesses (Dingman & Stone, 2007) as a model for faculty and universities (Buchen, 1998; McClellan, 2007), for schools, teachers, and youth programs (Crippen, 2005; Herman & Marlowe, 2005; Powers & Moore, 2005; Tate, 2003), nursing leadership (Howatson-Jones, 2004; Swearingen & Liberman, 2004), and across cultures (Hale & Fields, 2007; Wallace, 2007; Winston & Ryan, 2008). All of these were completed prior to the concept of servant leadership being clearly operationalized and clarified.

In the last nine years researchers have begun to empirically test servant leadership. This has been aided by a number of measurements that have been developed to measure servant leadership (Barbuto & Wheeler, 2006; Laub, 1999; Liden et al., 2008; Page & Wong, 2000; Patterson, 2003; Sendjaya, Sarros, & Santora, 2008). The measurement created by Barbuto and Wheeler (2006) and the measurement by Liden et al (2008) stand out because of their in-depth statistical analyses, which accompanied their development. In their measurement formation they tried to include both exploratory and confirmatory factor analysis had both convergent and divergent validity, and had criterion validity. Other servant leadership measurements seem to be currently lacking one or more of analysis in their initial measurement development.

Barbuto and Wheeler (2006) looked at eleven of the most talked about characteristics of a servant leader according to Greenleaf (Greenleaf, 2002, Spears, 1995) and operationalized these characteristics. Items were created that measured each characteristic. After doing the most extensive statistical analysis to date on a servant leadership measurement (i.e., exploratory factor analysis, confirmatory factor analysis, convergent and divergent validity and criterion validity) they found that servant leadership consisted of five dimensions: altruistic calling, emotional healing, wisdom, organizational stewardship, and persuasive mapping. They also found the servant leadership was positively related to extra effort, satisfaction, and effectiveness. This particular study provided empirical evidence to some of the possibilities of servant leadership.

Another group of researchers (Liden et al., 2008) followed Barbuto and Wheeler’s (2006) empirical investigation of servant leadership, and decided to do their own empirical investigation of servant leadership. After reviewing the literature and the measurements of servant leadership they felt there wasn’t a measurement that fully measured the ability of a servant leader to develop and empower their followers. Nine characteristics of a servant leader were proposed as a conceptual model for servant leadership. These dimensions were operationalized and items were constructed to measure each of them. These items were then empirically tested. After extensive
statistical analysis (i.e., exploratory and confirmatory factor analysis, convergent and divergent validity and criterion validity) they found that servant leadership consisted of seven-dimensions: emotional healing, creating value for the community, conceptual skills, empowering, helping subordinates grow and succeed, putting subordinates first, and behaving ethically. They added the dimension of helping subordinates grow and succeed, and empowering from Barubto and Wheeler (2006) measurement of servant leadership. These two added dimensions that focus on follower development makes Liden et al. (2008), measurement of servant leadership an ideal conceptual model to consider for the learning environment.

Servant leadership and learning organization

At the turn of the millennium one well-known leadership scholar suggested that the strength of the servant leadership movement and its focus on followers learning, growing, and autonomy will allow it to play a substantial role in future learning organizations (Bass, 2000).

This is partially evident by the number of articles introducing servant leadership to different aspects of education. Buchen (1998) introduced servant leadership to higher education. He suggested a framework for faculty and institutions to begin to consider servant leadership. McClellan (2007) showed how servant leadership might apply to academic advising in the university setting. Wis (2002) saw servant leadership as a valuable style of leadership when conducting and teaching music. Crippen (2005) gave a case study of servant leadership being used as a viable form of leadership in the management of an educational community. Herman and Marlowe, (2005) suggested that as teachers implement a style of servant leadership in the classroom a shift will occur within the classroom. The classroom will shift from a classroom of order to a community of caring. They suggest this strong focus on having a classroom of order is contributing to teacher burnout. Powers and Moore, (2005) illustrate how servant leadership should be considered whenever one considers the art of teaching. These articles primarily shared anecdotal stories, but no empirical evidence. In addition, these articles neglected to use a conceptualization of servant leadership that could be empirically measured, which would then lend itself to being studied within the contest of an educational setting.

One group of researchers did a quantitative study on servant leadership that included an educational organization. Taylor, Martin, Hutchinson, and Jinks (2007) did an empirical study that found that public school principals who rated themselves high in terms of their perception of their use of the characteristics of servant leadership were also rated significantly higher by their teachers for all of the five best leadership practices (i.e., challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart). These authors also suggest that servant leadership should be looked at in the context of the classroom. This study shows the possible benefits of considering servant leadership within learning organizations. It also suggests the need to consider servant leadership in the context of a learning classroom.

Another group of researchers did a quantitative study that illustrates the way servant leadership might influence followers. Neubert, Kacmar, Carlson, Chonko, and Roberts (2008)
used a national sample of 250 employees to study the effects of leadership style on the self-regulatory mindset of their employees. They found that a promotion focus mindset (i.e., need for growth, attention to gains, the attainment of aspirations and ideals) mediated the relationship between servant leadership and helping and creative behavior. In contrast, leaders who have an initiating structure style of leadership facilitate a prevention focus mindset (i.e., need for security, attention to losses, or the fulfillment of duties and obligations), which leads to in-role performance and deviant behavior from their employees. Through modeling servant leadership, leaders are able to encourage nurturance, aspirations, gains, and ideals in their employees, which led to an increase in extra role helping orientation and creative behavior. This study showed the possibility that servant leadership can foster development, aspirations, and ideals. The idea that a servant leader can influence their followers’ belief system seems like a possibility.

Incremental and Entity Self-theories

Individuals use different types of meaning systems to help them construct meaning from the many different experiences which occur in life (Dweck & Leggett, 1988; Kegan, 1982). These meaning systems help individuals form their beliefs about themselves, others, and the world around them (Dweck, Chiu, & Hong, 1995a; 1995b; Kegan & Lahey, 1984). These meaning systems are lenses that individuals use to interpret what happens in their life. Individuals beliefs about themselves (self-theories) cause them to act differently often in identical situations (Dweck, 1999).

Individuals often carry a belief system or a self-theory on their intelligence. Some people see their intelligence as fixed, concrete, and unchanging. This is called an entity theory of intelligence (Dweck, 1999). Individuals with an entity theory of intelligence like activities they can be successful at with low-effort, and activities that they do better at than their peers (Dweck & Leggett, 1988). They see their intelligences as uncontrollable—meaning what the individual does will neither increase, nor decrease their intelligence (Dweck, Chiu, & Hong, 1995a). Individuals with an entity theory desire to feel smart, and will often avoid challenges or setbacks because these can question the superiority of their intelligence (Dweck, 1999).

Other individuals see their intelligence as malleable, changing, and something they can improve (Dweck, Chiu, & Hong, 1995a; 1995b). This is called an incremental theory of intelligence (Dweck & Leggett, 1988). These individuals enjoy learning, improving and overcoming challenges and setbacks (Dweck, 1999). They believe their intelligence can be increased through their diligence and effort. They can become smarter (Dweck & Molden, 2005).

Research has shown that individuals with an incremental self-theory are focused when it comes to learning. They tend to put forth more effort in learning, and are more apt to assume a mastery goal orientation (Dweck & Molden, 2005). These individuals see effort as a positive thing, and succeed at challenges and setbacks (Dweck, 1999). Individuals with an incremental self-theory typically have higher self-esteem, their self-esteem isn’t lowered with critical feedback, they have active, direct, and constructive coping strategies, and redouble their efforts after failure (Dweck, 1999; Dweck & Molden, 2005). An incremental self-theory leads to better
performance in academics, computers skills, sports, and organizational performance (Dweck, 1999; Dweck & Molden, 2005). An incremental self-theory seems to have many positive benefits.

From the researchers knowledge there are no current studies on servant leadership and incremental self-theory. One study has considered the managers self-theory of intelligence and their coaching practices. Heslin, Vandewalle, and Latham, (2006) did three different studies that considered the incremental and entity self-theories of managers. Two of the studies found that managers with an incremental self-theory are more fully invested in others development. These managers try harder to guide, facilitate and inspire their protégé than do coaches who are have an entity self-theory. This study suggests the importance of leaders who are involved in the development of others in having an incremental self-theory.

Servant leadership and Incremental Self-theory

A servant leader isn’t a behavioral model of leadership, rather servant leaders are motivated by their values and belief systems (Farling, Stone, & Winston, 1999). A servant leader works from the belief that their followers can be developed through an evolutionary process (Spears, 1995). This belief that individuals can be developed may stem from the servant leaders incremental self-theory of intelligence (Dweck, 1999).

An incremental self-theory would enable a servant leader to have the perspective that their followers can be developed, and would give them the motivation to continue to guide, facilitate and inspire their protégé in their intellectual development (Heslin, Vandewalle, & Latham, 2006). In contrast, an entity theory of perspective sees intelligence as fixed, and thus a leader with this view of intelligence would not put forth as much effort to help their followers develop (Dweck, 1999; Heslin, Vandewalle, & Latham, 2006). Specifically, it seems possible that an incremental self-theory would be an antecedent to servant leadership—a form of leadership that is characterized by helping others grow and succeed (Liden et al., 2008). This particular servant leader dimension of helping others grow and succeed suggests that a servant leader has a genuine concern for the growth and development of their followers (Liden et al., 2008). Thus, it is highly probably that an incremental self-theory would be an antecedent to the servant leader dimension of helping subordinates grow and succeed, and negatively related to an entity self-theory.
Proposition 1: An incremental self-theory will be an antecedent to a servant leader that is positively related to the dimension of helping subordinates grow and succeed.

Proposition 2: An entity self-theory will be an antecedent to a servant leader that is negatively related to the servant leadership dimension of helping subordinates grow and succeed.

A servant leader is also concerned with putting the needs of others first (Greenleaf, 1977). An individual with an entity self-theory is concerned with always looking better than others, and tend to neglect the needs of others (Dweck, 1999). A servant leader is concerned with putting their followers first and helping the highest priority need of their followers to be met (Liden et al., 2008). A servant leader will often stop what they are doing to help satisfy the needs of their followers. This emphasize on others seems to stem from a way of looking at others that could be related to an incremental self-theory. It seems possible that an incremental self-theory would be a prerequisite for a servant leader that is characterized by the dimension of putting subordinates first (Liden et al., 2008). This dimension suggests that a servant leader’s actions and words will show their followers that they are concerned with helping them satisfy their needs. Moreover, it seems possible that an incremental self-theory would be an antecedent to the servant leader dimension of putting subordinates first, and negatively related to an entity self-theory.
Proposition 3: An incremental self-theory will be an antecedent to a servant leader that is positively related to the servant leadership dimension of putting subordinates first.

Proposition 4: An entity self-theory will be an antecedent to a servant leader that is negatively related to the servant leadership dimension of putting subordinates first.

Servant leaders are concerned with evolutionary growth, or the slow continue growth of their followers (Spears, 1995). This focus on their followers’ development makes servant leadership unique from other more leader centered forms of leadership (Graham, 1991). A servant leader is concerned with helping their followers grow and succeed (Liden et al., 2008). This belief system that people can grow and improve stems from their own personal incremental theory of intelligence (Heslin, Vandewalle, & Latham, 2006). By modeling this incremental theory of intelligence and focusing on followers’ development, servant leaders will be able to help their followers assume a stronger incremental theory of intelligence. It seems possible that the servant leader dimension of helping subordinates grow and succeed (Liden et al., 2008) will be positively related with the incremental self-theory of their followers and negatively related to their followers’ entity self-theory.

Proposition 5: The servant leadership dimension of helping subordinates grow and succeed will be positively related to followers’ incremental self-theory.

Proposition 5: The servant leadership dimension of helping subordinates grow and succeed will be negatively related to followers’ entity theory.

Servant leaders desire to have their followers become more autonomous and independent (Greenleaf, 1977). Liden et al (2008) noted that a unique dimension of a servant leader is their ability to empower their followers. Empowering according to these researchers is the servant leaders desire to encourage and facilitate others in identifying and solving their own problems. A servant leader helps their followers develop the judgments necessary to know when and how to complete difficult tasks. In other words servant leadership builds follow autonomy. Similarly, an individual in an incremental self-theory thrive on overcoming challenges and setbacks. They are often known for redoubling their efforts, and can work independently on challenging tasks (Dweck, 1999). Thus, it seems possible that the servant leader dimension of empowering will be positively related to their followers’ incremental self-theory.

Proposition 6: The servant leadership dimension of empowering will be positively related to followers’ incremental self-theory.
Proposition 7: The servant leadership dimension of empowering will be negatively related to their followers’ entity self-theory.

A servant leader is focused on building people, rather than obtaining a product or organizational goal (Graham, 1991; Greenleaf, 1977). This focus on people allow a servant leader to be concerned with their followers needs, and they strive to help their followers fulfill their needs. Servant leadership is distinct from other forms of leadership because of the dimension of putting subordinates first (Liden et al., 2008). This dimension suggests that servant leaders have genuine concern for their followers. Servant leaders show through their actions and words that their followers needs are important. Research has also shown that to increase an individual’s incremental self-theory that the leader must have a person-oriented focus, rather than a process-oriented focus (Dweck, 1999). Thus, servant leadership and its person-oriented dimension of putting subordinates first seems like it will be positively related to their followers incremental self-theory, and negatively related to their followers entity theory.

Proposition 8: The servant leadership dimension of putting subordinates first will be an antecedent to followers’ incremental self-theory.

Proposition 9: The servant leadership dimension of putting subordinates first will be negatively related to followers’ entity self-theory.

Achievement goals

Incremental and entity self-theories lead individuals to value different types of goals. Dweck (1999) has found that an entity theory leads individuals to pursue performance based goals, whereas, incremental self-theories lead individuals to pursue mastery oriented goals. Individuals that have a mastery goal orientation focus their efforts on acquiring increased competence, increased knowledge, and in-depth understanding (Murphy & Alexander, 2005). Individuals that pursue performance goals are concerned with looking good in the eyes of others. They desire to avoid negative judgments, and enjoy things they can do effortlessly because they feel that their intelligence is only being partially activated (Murphy & Alexander, 2005). Furthermore, it seems possible that if an incremental self-theory is an antecedent of servant leadership than a mastery goal orientation may also be an antecedent to servant leadership.

Incremental and entity self-theories lead individuals to value different types of goals (Dweck, 1999). Servant leaders are motivated by their goals, values, principles, and beliefs (Farling, Stone, & Winston, 1999). It seems possible that if a servant leader possesses an incremental self-theory they would also possess a mastery goal orientation. A mastery goal orientation may be an antecedent to servant leadership. The servant leaders belief system that individuals can grow and develop allows them to purse goals that are mastery oriented (Dweck, 1999). They are motivated by helping others grow and develop, rather than being motivated by
organizational performance goals (Graham, 1991; Smith, Montagno, & Kuzmenko, 2004; Stone, Montagno, & Kuzmenko, 2004). Thus, a mastery goal orientation may be an antecedent to several of the dimensions of servant leadership that are focused on development, learning, autonomy, and growth.

Proposition 8: A mastery goal orientation will be an antecedent to a servant leader that is positively related to the dimension of helping subordinates grow and succeed.

Proposition 9: A mastery goal orientation will be an antecedent to a servant leader that is positively related to the dimension of putting subordinates first.

Proposition 10: An individual with a performance goal orientation will be negatively related to servant leadership.

A mastery goal orientation can be developed in others through specific person-oriented strategies. Mastery goal orientation is developed through focusing on follower improvement, growth, learning, development, and autonomy (Urdan & Turner, 2005). In addition, making the material relevant and meaningful can also foster the development of mastery goal orientation (Elliott, 2005). A servant leader strives to make things relevant and meaningful through satisfying their followers’ needs. A servant leader is concerned with the growth, development and autonomy of their followers (Greenleaf, 1977). Thus, it seems highly probable that servant leadership will foster a mastery goal orientation in their followers.

Proposition 11: The servant leadership dimension of helping subordinates grow and succeed will be positively related to followers’ mastery goal orientation.

Proposition 12: The servant leadership dimension of empowering will be positively related to followers’ mastery goal orientation.

Proposition 13: The servant leadership dimension of emotional healing will be positively related to followers’ mastery orientation.

Proposition 14: The servant leadership dimension of conceptual skill will be positively related to followers’ mastery orientation.

Researchers have suggested that servant leadership may be beneficial for the learning environment (Bass, 2000; Smith, Montagno, & Kuzmenko, 2004). A servant leaders focus on their followers’ development, growth, learning, and autonomy seem to be a style of leadership that may flourish within the learning classroom. Other charismatic forms of leadership tend to
not focus as much on follower development and follower well-being (Graham, 1991; Stone, Russell, & Patterson, 2004). In addition, servant leaders are motivated by their beliefs (Farling, Stone, & Winston, 2004). These beliefs are formed from personal meaning systems that are developed by individuals to make meaning of the vast amount of experiences that are encountered (Dweck, 1999). A servant leader’s focus on follower development suggests that a servant leader has an incremental self-theory when it comes to intelligence (Dweck & Leggett, 1988). This allows servant leaders to focus on helping others learn, develop, and grow. Thus, servant leaders may be the most effective charismatic form of leadership in helping students, master new material.

Proposition 15: Servant leadership will be more effective in enabling learning to occur within the classroom than other charismatic forms of leadership.

Summary
A leader is seen as someone capable of influencing others in overcoming a challenging obstacle. Leaders in politics, athletics, and business are lauded for their ability to influence others in overcoming some type of challenge. However, influencing and leading others through the difficult and challenging process of learning is seldom recognized as a leadership phenomenon. Academia is beginning to recognize the leadership role of teachers within the learning classroom. Teachers are leaders who lead and influence students through the learning process. This paper proposes that servant leadership may be an ideal form of leadership for classroom teachers.

This paper assumes that an effective teacher is interested in the growth and development of their students. Therefore, an effective leader within the classroom must also share this same belief system. The positive leadership of servant leadership is distinct from other forms of leadership because of its strong emphasize on service, autonomy, growth, and development of their followers. This makes servant leadership an ideal form of leadership to consider within the learning classroom.

Previous researchers have suggested that servant leadership may be a strong form of leadership within learning organizations (Bass, 2000; Smith, Montagno, & Kuzmenko, 2004), and others have suggested that servant leadership should be considered within the classroom (Taylor, Martin, Hutchinson, & Jinks, 2007). Several researchers have suggested the relevance of servant leadership to the education sector (Buchen, 1998; Crippen, 2005; McClellan, 2007; Powers & Moore, 2005; Wis, 2002), but have stopped in proposing propositions that can be empirically tested. Within the newly merging conceptualization and measurement of servant leadership (Liden, Wayne, Zhao, & Henderson, 2008) it makes it possible to conceptual servant leadership in such a way that it can be easily measured. This paper has proposed propositions of how servant leadership might apply within the learning classroom.

An effective leader within the classroom must believe that individuals can grow, develop, and learn. A servant leader possesses these beliefs. Servant leaders are concerned with being a
facilitator, guide and inspiring their followers to personal development and growth. This paper suggests that servant leadership may be an ideal form of leadership for the learning classroom. This paper proposes that servant leader may have an incremental self-theory, and mastery goal orientation that are antecedents to servant leadership. These antecedents allow a servant leader to have the belief system that individuals can develop. This belief system helps servant leaders develop the incremental self-theory and mastery goal orientation of their followers. This paper outlines propositions on how incremental self-theory and mastery-goal orientation are both antecedents to dimensions of servant leadership and outcomes of servant leadership.

Discussion

This paper makes contributions to both the leadership and education fields. The first contribution this paper makes is by highlighting the understudied leadership role that teachers have within the classroom context. Leaders are often recognized for influencing others in overcoming difficult challenges. However, individuals that lead and influence others through the difficult process of learning are not typically lauded for their leadership abilities. This leadership role of teachers is an understudied phenomenon (Harris, 2005).

The second contribution this paper makes is by linking a positive form of leadership known as servant leadership to the learning classroom. Previous research has only suggested the possibility that servant leadership may play a beneficial role in education (Bass, 2000; Smith, Montagno, & Kuzmenko, 2004). This paper highlights two possible antecedents of a servant leader and two outcomes of the servant leadership process, and their positive effects on learning within the classroom. A conceptual model is proposed that highlights the idea that an incremental self-theory and mastery goal orientation are antecedents to a servant leader. This model also highlights how servant leaders are able to develop the incremental self-theory and mastery goal orientation of their followers, which leads to a greater increase in learning within the classroom.

Thirdly, this paper contributes strongly to the servant leadership literature by suing a newly developed servant leadership conceptual model and measurement (Liden, Wayne, Zhao, & Henderson, 2008) as the foundation of linking servant leadership to the learning classroom. This paper suggests two new possible antecedents and outcomes of servant leaders. Finally, it has been suggested by previous research that servant leadership is applicable to a variety of sectors (i.e., business, churches, foundations, and education). This paper proposes propositions that can be empirically tested within the context of the education sector. This sector has been previously suggested as possible benefiting the most from a leader who has a servant leadership style (Bass, 2000).

Finally, this paper has developed propositions that can be empirically tested. With the recent development and advancement of the servant leadership literature in terms of being able to successfully measure servant leadership (Barbuto & Wheeler, Liden, Wayne, Zhao, & Henderson, 2008). Servant leadership can begin to be empirically tested in the educational
context. Previous introduction of servant leadership have not proposed propositions that are easily measured and quantitatively studied. In addition, there are well established measures of incremental and entity self-theories, and mastery and performance goal orientations (Dweck, 1999; Urdan & Turner, 2005). All of these measurements allow for researchers to test the propositions proposed in this paper so the education and leadership field can progress.

Conclusion

This paper has outlined a conceptual model linking servant leadership to the learning classroom. With an increased recognition of the leadership role, which teachers occupy within the learning classroom has initiated the question: What type of leadership would be most beneficial in the learning classroom? This paper proposes that the positive leadership of a servant leader can guide, facilitate, and inspire the growth and development of students to achieve greater learning within the classroom. Servant leadership may be an ideal form of leadership within the learning classroom.

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LEADERSHIP ACROSS THE CURRICULUM: ONE BUSINESS SCHOOL’S RESPONSE TO THE CRITICISM OF MBA PROGRAMS

Rosemary Maellaro, University of Dallas, rmaellaro@gsm.udallas.edu
J. Lee Whittington, University of Dallas, jlwhitt@gsm.udallas.edu
Timothy Galpin, University of Dallas, tgalpin@gsm.udallas.edu
Richard Peregoy, University of Dallas, Peregoy@gsm.udallas.edu

ABSTRACT
Critics of business education claim that business schools have traded relevance for the rigor of social science research that has little connection with the problems faced by practicing managers. Yet, relevance and rigor need not be treated as mutually exclusive constructs. They can be integrated; however, doing so requires a different approach to the MBA curriculum, and may require a unique faculty to deliver that curriculum. In this paper we describe one school’s response to the critics of graduate business education. First, we briefly review the common criticisms of MBA programs. Then, we describe our efforts to develop and implement a mission-driven curriculum that not only addresses the shortcomings of more traditional approaches to curriculum, but transcends them. We explain the distinctive features of the new curriculum; and finally, we discuss the important role of the faculty’s unique combination of academic and professional qualifications in delivering this curriculum.

INTRODUCTION
In order to develop the next generation of business leaders, MBA Programs must establish meaningful links between learning the science of management, developing the art of leadership, and acquiring the practical skills needed to effectively address the real-life issues leaders face in organizations. Practicing managers claim that the content and delivery of graduate management curriculum is isolated from what actually occurs in business organizations. This alleged disconnect between the MBA curriculum and the reality of organizational challenges continues to fuel an ongoing debate that centers around a perception that relevance and rigor cannot be pursued simultaneously in the context of business education (e.g., Augier & March, 2007; Bennis & O’Toole, 2005; Schoemaker, 2008; Tushman, O’Reilly, Fenollosa, Kleinman, & McGrath, 2007).
Relevance and rigor need not be treated as mutually exclusive constructs. They can be integrated; however, doing so requires a different approach to the MBA curriculum, and may require a unique faculty to deliver that curriculum. In this paper we describe one school’s response to the critics of graduate business education. First, we provide a brief overview of the concerns about MBA programs raised by the business community. Then, we describe our efforts to implement a mission-driven curriculum that not only addresses the shortcomings of more traditional approaches to curriculum, but transcends them. We explain the distinctive features of the new curriculum; and finally, we discuss the important role of the faculty’s unique combination of academic and professional qualifications in delivering this curriculum.

THE CRITICISM

A crisis of confidence in graduate management education programs has permeated the literature over the past 20 years because many practitioners believe that graduates of these programs are not capable of dealing with the complex, ambiguous, and often unpredictable issues that managers face in organizations today. The business community perceives that those who design management education curricula are too far removed from the practical problems that confront managers and that academically trained faculty are not able to “hold their own” in the business school classroom because they lack sufficient business experience (Schoemaker, 2008: 120). Critics also contend that recent graduates have not been properly exposed to the human side of organizational issues and the more collaborative, shared style of leadership that is required to resolve them (Hogan & Warrenfeltz, 2003; Pfeffer & Fong, 2002; Porter & McKibbin, 1988; Schoemaker, 2008). Employers of MBA graduates seek individuals who have developed systemic, holistic, and inclusive leadership skills that enable them to positively influence business outcomes that will benefit the entire organization over the long term (Athavale, Davis, & Myring, 2008; Augier & March, 2007; Fischer & Glenn, 2008; Garvin & Datar, 2009).

The consensus of MBA critics is that graduates need to be better equipped with the requisite skills to fully engage employees and collaboratively resolve complex business issues in an efficient and effective manner (Fischer & Glenn, 2009; Garvin & Datar, 2009; Harrison, Leitch, & Chia, 2007; Hogan & Warrenfeltz, 2003; Pfeffer & Fong, 2002; Samuelson, 2006). Beyond suggesting that management education programs include one or two interpersonal skill courses, these criticisms raise the question of whether the degree programs offered by institutions of higher business education should be completely redesigned in order to create Masters of Business Leadership (MBLs) rather than Masters of Business Administration (MBAs).
Critics frequently point out that MBA programs do not develop students’ leadership skills because the typical business curriculum focuses on distanced objective analysis and technical expertise rather than the skills of practical management (Adler & Harzing, 2009; Roberts, 1996). This has resulted in graduates who know about management, but not how to or when to manage (Chia & Holt, 2008), and led Mintzberg (2004) to suggest that the degree be renamed to Masters of Business Analysis.

The emphasis that business education places on the development of technical and analytical skills prepares students to be managers who deal with technical problems, where the problem is clearly understood and there is a known solution that can be applied to resolve it (Heifetz, 1994; Heifetz & Linskey, 2002). However, managers are increasingly faced with complex, and often ambiguous, adaptive problems. These challenges require more than technical analysis. They require that leaders learn how to understand the problem, how to develop solutions to the problem, and how to facilitate the adaptive work of the people who are facing the problem (Heifetz, 1994; Heifetz & Linskey, 2002; Williams, 2005). Business schools must create curricula that prepare their graduates to face this reality.

The critics agree that there is a fundamental disconnect between the preparation of business school professors and the skill development being requested of business faculties. Mintzberg contends that management is a “practice craft” and that, in addition to learning “about” business, students must learn how to practice management (as cited in Pfeffer & Fong, 2002). To do so entails learning to behave differently, which will require MBA students to move beyond cognitive awareness to behavioral change and beyond management literacy to management competence (Allio, 2005; Whetton, 1983). In a frequently cited Academy of Management Learning and Education article, Pfeffer and Fong (2002) offer a relatively simple solution to this dilemma:

There is no reason that in a world seeking both knowledge and training, business schools can’t succeed in doing both. To do so, all that is required is for business schools to model themselves more closely on their other professional school counterparts and less on arts and sciences departments. This entails building curricula that are evaluated, in part, by how well they actually prepare students to be effective in practicing the profession.

ONE BUSINESS SCHOOL’S RESPONSE TO THE CRITICISMS

The Context
Although we have historically delivered a practice-based approach to graduate business education, in 2007 the University of Dallas College of Business set out to revise its MBA program in a manner that would result in the development of students’ practical leadership skills (relevance) in addition to providing a sound theoretical foundation of the knowledge that underpins management education (rigor). This effort was driven by the practice-oriented mission of the College of Business and informed by curriculum guidelines established by accrediting body standards. (Note: UD’s Graduate School of Management is accredited by ACBSP; the College of Business’ AACSB Accreditation Plan was accepted in Spring 2008). Within these general guidelines, we sought to create a curriculum that incorporated the guiding principles of the accrediting bodies while also reflecting the essence of our distinct approach to business education. We accomplished this by redesigning and implementing our MBA program to include curricular content and instructional methodologies delivered by uniquely qualified professors, as shown in the Leadership Across the Curriculum model in Figure 1.

**FIGURE 1: LEADERSHIP ACROSS THE CURRICULUM**

It was our desire to provide students with a broad-based educational experience, a thorough understanding of how businesses function as complex systems, and the ways in which their individual efforts could positively impact organizational outcomes through collaborative problem-solving, informed decision-making, and a network of partners. The result of this effort was the creation of a curriculum that is synchronized with the real problems of the business world and one that better prepares managers to solve them, (Fischer & Glenn, 2008; Hayes, 2002; Leavitt, 2000; Longenecker & Ariss, 2002).
The Challenge

In order to revise our MBA Core Curriculum, a faculty committee was appointed. It was charged with developing a curriculum that would meet the standards and guidelines of the accrediting bodies, yet retain the practice-oriented uniqueness that provides a source of competitive advantage in the marketplace served by the University of Dallas. In addition, the committee was asked to work within the following parameters:

1. Create a curriculum that does not exceed the current maximum 49 credit hours. This requirement reflected the intensively competitive situation the school faces in the North Texas marketplace.

2. Retain the Capstone Experience. This is a distinctive course that requires all students to participate in an applied research and consulting project with a local organization.

3. Retain the elective portion of our curriculum that allows students to have an industry-specific or functional emphasis in addition to the common elements of management education provided by the MBA core curriculum.

4. Create a new course to address the universal issues of business and society, sustainability, and ethics.

A Proposal for a Mission-driven MBA Curriculum

The faculty committee responded to this challenge by creating a proposal for a mission-driven MBA curriculum. In doing so, they focused on the following portion of the College’s mission statement:

The College of Business is a professional school whose primary purpose is to prepare its undergraduate and graduate students to become principled and moral leaders who are also competent and responsible managers (emphasis added).

Based on the College’s explicit emphasis noted above, the faculty determined that the goals of the new MBA curriculum would be to develop: a) The characteristics of principled and moral, b) Leadership potential, c) The characteristic of competent and responsible, and d) Management knowledge, skills, and abilities. These elements of the College’s mission statement became the drivers of the new curriculum.

Principled and moral: Moral leadership is manifest in the awareness of the leader’s and organization’s rights and responsibilities toward stakeholders and the consequent decisions and actions. At a minimum, leaders must realize their holistic fiduciary responsibility toward varied stakeholders in the allocation and use of the resources at their disposal. Accordingly, the leader’s responsibility is to maximize value in a manner that appropriately addresses
stakeholder rights while ensuring the long term viability of the organization. We believe that stakeholders include, but are not limited to, equity holders, managers, employees, customers, vendors, competitors, and community. We believe that resources include, but are not limited to, financial, natural environment, human, physical capital, and organizational systems.

**Leadership:** Leadership potential arises from the ability to understand human behavior, the ethical dimensions of decisions, and the value that arises from decisions and actions. Leadership potential is evident in the ability to analyze and determine potential and optimal futures, to communicate a vision of the desired state, and to influence followers to achieve it.

**Competent and responsible:** One demonstrates competent and responsible stewardship of resources through the demonstration of optimal value creation as appropriate to the stakeholder. To be competent and responsible, one must understand the varied dimensions of value, the sources of economic, psychological, and social value, and the management of resources to create and deliver value.

**Management:** Management potential is evident in the demonstrated knowledge, skills and abilities that allow the manager to strategically plan, organize, lead, and control resources in a manner that creates, grows, sustains, and delivers value appropriate to stakeholders.

In meeting these goals, the committee created an MBA program that was designed to achieve the following learning objectives:

- Our students will be principled and moral decision makers
- Our students will be effective leaders
- Our students will be competent in creating value for their stakeholders
- Our students will manage effectively in a globally integrated environment
- Our students will work productively in a socially complex environment

The goals derived from our mission statement were further interpreted by the committee to guide the development of specific courses that are part of a curriculum comprised of four components: Foundation courses, Value Creation Core courses, Advanced Integrative Core courses, and Industry or Functional Specific Electives courses.

**Curriculum Components**

Part 1: Foundations of management knowledge. These courses identify those prerequisite knowledge, skills and abilities necessary for the successful professional development of principled and moral leaders who are also competent and responsible managers. The Graduate School of Management at the University of Dallas offers a professional MBA program and has
traditionally served students with a wide range of academic preparation for graduate study in business. Historically, only 40% of students enrolling in the program have had an undergraduate degree in business. The majority of students have come from engineering, arts, and science backgrounds. Thus, it is imperative that students entering the MBA program be adequately prepared. In order to address the variance in academic preparation, the curriculum committee created a set of courses that are designed to provide the foundational knowledge upon which the MBA Core and Advanced Integrative Core are built. These eight courses were designed to provide the core body of foundational knowledge normally attained in a BBA degree; refer to Figure 2: Foundation Courses.

**FIGURE 2: FOUNDATION COURSES**

<table>
<thead>
<tr>
<th>Financial Accounting</th>
<th>Management &amp; Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial Accounting</td>
<td>Management Science</td>
</tr>
<tr>
<td>Economic Analysis</td>
<td>Marketing</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Statistics</td>
</tr>
</tbody>
</table>

Part 2: The MBA Core: Competencies for Creating Value. The revised core curriculum was developed around the theme of creating value for the full-range of stakeholders served by typical organizations. These courses were designed to identify the knowledge, skills and abilities that are necessary to lead and manage the creation, growth, sustenance, and delivery of value to primary stakeholders; refer to Figure 3: Value Creation Core.

**FIGURE 3: VALUE CREATION COURSES AND CREDIT HOURS**

<table>
<thead>
<tr>
<th>Leadership Effectiveness and Development: LEAD (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project and Team Management: First Course Taken (1)</td>
</tr>
</tbody>
</table>
| Value Creation Competencies Courses
| 5 @ 3 credit hours each (15) |
| 1) Economics and Competitive Advantage  
2) Managerial Finance  
3) Value-Based Marketing  
4) Management of Operations  
5) Value-Based Leadership |

Part 3: Integrating and Advancing the Development of *Principled and Moral Leaders who are also Competent and Responsible Managers*. The purpose of this segment of the curriculum is to
identify the appropriate developmental experiences necessary to synthesize the fundamental knowledge and value creation competencies in a way that allows students to apply these skills in both simulated and actual organizational contexts. These courses provide the opportunity for students to further develop their potential to lead in a modern, global business environment; refer to Figure 4: Integrated Advance Core.

**FIGURE 4: INTEGRATE ADVANCED CORE**

<table>
<thead>
<tr>
<th>1) Business and Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Global Strategy (with simulation)</td>
</tr>
<tr>
<td>3) The Capstone Experience</td>
</tr>
</tbody>
</table>

This curriculum clearly addresses the need for an integrated course of study that was built around the mission of the college and in recognition of the need to develop managers and leaders who can respond to the legitimate claims of multiple stakeholders.

As the curriculum was developed, a unifying theme emerged: *Leadership Across the Curriculum*. In addition to providing the analytical skills required to become competent and responsible managers, we took specific steps to develop the leadership skills of our students. We designed specific courses to develop these skills, but we also created multiple opportunities for students to practice these skills as they move through the program.

The new curriculum that was developed by our faculty (graphically depicted in *Figure 5*) provides a unique blend of rigor and relevance that responds to the critics of MBA programs. We have addressed the criticism that MBA graduates are not well-rounded leaders, do not understand how businesses actually function and do not have the skills that enable them to effectively solve multidisciplinary problems in a collaborative manner (Athavale, Davis, & Myring, 2008; Schoemaker, 2008). Our new MBA curriculum is designed to help students develop practical skills (such as self-awareness, critical thinking skills and problem-solving abilities) that they can apply immediately to real-life business dilemmas. We emphasize practical issues and skills rather than simply allowing an academic agenda to drive our program (Samuelson, 2008). In accomplishing this, our integrated curriculum also prepares our graduates for greater career success.

**DISTINGUISHING FEATURES OF UD’S NEW MBA CURRICULUM**
In addition to providing the technical and analytic skills necessary for competent and responsible management, our approach to graduate business education equips our students with actionable knowledge that “[transcends] purely scientific concerns and enables organizational members to make informed choices about important practical problems and to implement solutions to them effectively” (Blood, 2006: 209). Our curriculum accomplishes this by incorporating courses that address the development of leadership competence through subject matter not typically found in MBA programs, and by facilitating learning through the use of activities and methods that are informed by adult learning theory (i.e., the educational philosophy of andragogy). The next section describes the leadership competencies that are addressed in the curriculum, the learning activities that facilitate their development, and overviews of the courses in which they are addressed.

FIGURE 5: UD COLLEGE OF BUSINESS MBA CURRICULUM

Competencies, Courses, and Learning Activities
**Intrapersonal Skills: Leadership and Self-Awareness.** In order to achieve outstanding results for themselves and their organizations, leaders must develop self awareness and the capacity for ongoing personal reflection (Forrest & Peterson, 2006; Lash, 2002). Self-awareness is a broad concept that concentrates on the image that an individual has of him/herself, how well that is aligned with their personal values, and whether or not that image is accurate in comparison with how others perceive that individual (McCarthy & Garavan, 1999). Self-aware leaders typically perform better at work because they have a congruent sense of self and exhibit integrity, people acumen, and trust-building behavior (Nichols, 2008; Stein & Book, 2000; Whetton & Cameron, 2002).

The goal of facilitating the development of self-awareness for leaders is to help them understand what makes them do what they do (Weisinger, 1998). The process therefore is essentially an inner journey (Lash, 2002) that can be accomplished through careful introspection or with the help of assessments by others. The new curriculum addresses this via peer feedback exercises and Leadership Effectiveness and Development seminars.

**Peer to Peer Feedback.** Low self-awareness, combined with the limited time available for self-reflection in their day-to-day work, creates a major gap in a leader’s development. This breach can and should be filled by incorporating regular opportunities for participants in MBA programs to receive feedback about their leadership skills, and to reflect on and apply that feedback. To that end we employ an approach that provides opportunities for students to regularly receive feedback from their peers in several courses throughout the program that involve team projects and/or group discussions.

We have conducted a peer to peer feedback exercise with hundreds of students for over four years, and it has been an excellent technique to build a culture of teamwork, trust, continuous learning, performance improvement, and candor (Galpin & Whittington, 2009). We have found this to be one of – if not the most – impactful exercises we have ever conducted with our classes. The exercise is best done about three to four weeks into a semester, once the students have had time to observe each other in team situations and/or group discussions. Conducting this exercise periodically throughout a course (e.g. three to four times during a term) establishes regular points for frank one-to-one discussion between students. It should be noted that implementing peer to peer feedback in a classroom certainly creates initial discomfort for the participants. However, once familiar with the exercise, students are consistently hungry for more feedback from each other. Another benefit of this exercise – in addition to increasing students’ self-awareness – is that it increases their comfort with providing performance feedback to employees, which is a critical leadership skill.
**LEAD Courses.** The Leadership Effectiveness And Development (LEAD) courses in the new curriculum are designed to help students build on interpersonal strengths and further develop their collaborative leadership skills. We believe that facilitating the improvement of our students’ competencies in the interpersonal aspects of leadership is an important component of our program in that it develops the well-rounded leaders capable of handling the people aspects of business that hiring organizations are seeking. The topics addressed in these seminar-style classes include Emotional Intelligence: Personal Competence and Relationship Management, Negotiating for Success, Delegating for Results, Influencing Skills for Effective Leadership, Setting High Performance Goals, Building Trust in the Workplace, and Coaching for Results. These sessions typically begin with the administration of a self-assessment instrument and are highly interactive, giving students several opportunities to practice and receive feedback on newly acquired skills.

**Project and Team Management Course.** As workplaces become more complex and organizations must rely on work teams to achieve business goals (Alexander, 1994; Hansen, 2006), collaborative leadership skills are among the key competencies that employers desire most in potential managers. In an effort to develop students’ skills in this area, team projects have become quite common in MBA programs. However, class project teams frequently deteriorate into leaderless and directionless teams that result in inequitable distribution of the workload, lack of member commitment to team goals, reduced communication and less cooperation among team members (Markulis, 2006). Therefore, the new curriculum requires that all students take as their first course Project and Team Management. The course addresses fundamental concepts and methods for effective and productive teamwork in the project environment and lays the foundation for planning and managing project work during the MBA program. Students learn what makes teams effective, how to spot behaviors that cause teams to become ineffective, how to recognize team difficulties and how to resolve unproductive conflicts. Students work as members of assigned teams throughout the course to practice applying the theories and concepts associated with successful project management and effective team functioning. They also learn how to manage teams efficiently through the development stages of forming-storming-norming-performing and they become familiar with the roles of designated team leaders as well as the task and maintenance leadership roles that different team members must step forward to fill when needed. In addition to the group grade on the team project, an individual grade on a comprehensive final exam and on a self-reflective paper, a percentage of the overall course grade includes a peer evaluation from the student’s team mates. This formal evaluation, submitted anonymously upon the conclusion of the course, assesses each person’s contributions to the successful accomplishment of the team’s task and to the maintenance of effective social relationships within the team.
Value-Based Leadership Course. The Value-Based Leadership course focuses on how leaders create organizational value through the leadership of their human resources. The course content is an intersection of organizational: behavior, development, design, and change. The students are challenged to develop the knowledge, skills, and abilities necessary to plan, evaluate, implement and improve organizational initiatives, with an emphasis on critically evaluating multi-dimensional perspectives regarding leadership and value-creation. The key course topics covered are value definition and assessment, organizational theory, human resources management, organizational behavior, and organization development and change.

To facilitate student leadership development, the primary delivery methodologies employed in the Value-Based Leadership course are group discussion and experiential exercises. For example, participants conduct leadership assessments and produce detailed proposals for leadership improvement projects using the organization they currently work for or previously worked for as the setting. As a result, students are able to identify various ways that leaders can create value in organizations. Additionally, students learn how to determine leadership strengths and weaknesses in the organization as well as individually within themselves. They also can articulate their approach to organizational leadership and apply various leadership techniques in different organizational environments and situations that they may encounter throughout their careers. Student learning is measured through instructor evaluations regarding the quality of their improvement projects, as well as the quality of their participation in the group discussions. The peer to peer feedback exercise described earlier is incorporated throughout this course; and beyond simply receiving a numerical score or letter grade, individual feedback is provided to each course participant by the course instructor regarding their improvement projects and discussion participation.

Business and Society Course. Although we deal with ethical dimensions of leadership throughout the curriculum, the Business and Society course was designed to provide a specific focus on the issues of ethics, social responsibility, and sustainability. As a part of our advanced integrative core, this course immerses students in the aspects of corporate leadership pertaining to the social, political, legal and regulatory environments surrounding business today. The course begins with investigations of corporate social responsibility and the ethical dimensions of management actions and decision-making processes. Priority is given to perspectives regarding roles of the firm that lead to governance mechanisms and operating policies that encourage ethical conduct, serve stakeholders, and support long-term corporate sustainability. Throughout the course students gain a better understanding of the interplay among business, government and society, with particular attention to how firms manage those relationships. Students examine the challenges of meeting the needs and interests of all organizational stakeholders in a manner that achieves a balance between social, environmental, and economic resources. In addition, students
investigate how to pursue sustainable growth strategies and paths which help serve the world’s poor.

Through group discussions and a team project (including peer to peer feedback), the Business and Society course develops students’ leadership skills in the areas of global ethics, stakeholder relationship management, assessing and measuring corporate social responsibility (CSR), and effectively implementing CSR initiatives. Student learning is measured through instructor evaluations regarding the quality of the team project, as well as the quality of student participation in group discussions.

*Global Strategy Course.* This course presents an interesting link to leadership with an inter-cultural approach to understanding the strategy and operations of the multinational enterprise (MNE). It is designed to assist students in developing knowledge of political, economic and monetary systems. Students are assisted in developing an understanding of cultural impacts on conducting business with its attendant risks and opportunities in areas of emerging centers of wealth creation. They also gain an understanding of foreign direct investment and foreign market entry and exit strategies.

A variety of teaching and learning approaches are employed in this course. Assigned readings, lectures, videos, quizzes to assess individual learning, and a team based simulation require the students to be rigorous in their preparation, vigilant in their participation, and perceptive in class interaction. Students develop skills as individuals, as team members, and as leaders in establishing and operating a simulated high velocity, technology based industry with global manufacturing, marketing and financial dealings. Grading is based on individual contribution and team outcomes. Peer evaluation impacts favorably (or unfavorably) on the individual’s grade for the team based simulations. Students have the opportunity to assess each other on their individually produced results, on their contributions to team efforts, and on their demonstrated leadership abilities.

Fully one-half of the course is taken up with a team based simulation exercise. Students simulate the strategic operation of an MNE over a multiyear period (each 1 year period equaling 1 week) with yearly reports indicating performance of the firm discussed and reviewed in each time frame. Each team submits its strategic vision, mission and plans for the company and relates achieved performance to plans. The early value-based courses taken as prerequisites provide significant benefit that becomes evident to the students in the demonstrated practice of the simulation. A real learning experience comes in the plus / delta exercise of *lessons learned.* Students learn from the other teams as they share how they went about crafting a winning strategy and managing a MNE in an environment of intense global competition. The discussion
about real-life applications of lessons learned indicates that practice has taken hold and will likely be used in the daily work routines of the students.

The Capstone Experience. In the vast majority of MBA programs, the culminating educational experience is a strategic management course in which students do case analyses and make presentations to their classmates. The culminating educational experience for students in the University of Dallas MBA program is a project-based applied research and consulting course known as the Capstone Experience, which may be taken only in the student’s final trimester of MBA study. This course enables students to synthesize what they have learned about leadership throughout the program and to apply the leadership skills they have developed to a team consulting assignment with a real company. The key goals of the Capstone Experience are to develop the students’ ability to consider an enterprise as an integrated entity and to apply the leadership, team work, and strategic thinking skills that they have developed throughout the MBA courses described in this article.

The specific leadership skills applied during the Capstone Experience include client coordination, development of a project plan, strategic analyses and strategic thinking, work ethic, teamwork, and written and verbal communication. In order to apply and further develop these leadership skills, the primary delivery methods used in the Capstone Experience are group discussions, brainstorming, student presentations, peer-to-peer feedback, and instructor-to-student as well as client-to-student feedback. As a result of these applied activities, students come out of the Capstone Experience being able to strategically analyze an organization’s performance, determine an organization’s strengths and areas for improvement, describe their individual leadership and teamwork strengths and developmental areas, effectively participate on a productive team, and deliver clear written and verbal communication. Student learning during the Capstone Experience is measured through instructor evaluations regarding the quality of the student teams’ consulting deliverables, as well as the quality of student team participation. In line with several of the courses the students have taken during their MBA program, beyond receiving a letter grade for the Capstone course, individual feedback is provided to each student by the course instructor regarding their teamwork, communication, and strategic thinking skills.

A FACULTY OF SCHOLAR-PRACTITIONERS

The unique curriculum we have created is enhanced because it is delivered by a unique faculty of scholar-practitioners. Our faculty exemplifies the original meaning of education: they lead out. Leading out implies a triggering of latent knowledge within the learner. A professor’s leading out role in experiential education provides learning opportunities through self-assessment, case analysis, simulations and applied projects with live clients. The University of Dallas College of
Business faculty draws on their own academic preparation and their extensive experience as practicing managers and active consultants to enhance their students’ learning experience. This is in contrast to typical faculty profiles at many business schools.

Few business academics have ever founded or run a company, served on corporate boards, or conducted significant consulting beyond lectures or limited case studies. Although they can . . . help build a cumulative knowledge base, they may not get at the core issues that managers struggle with. Just as medical schools need clinicians who see patients or have wielded the knife, business schools need experienced clinicians. (Schoemaker, 2008)

The University of Dallas College of Business faculty consists of academically qualified individuals who also possess relevant business experience in their respective fields to be professionally qualified as well. In rebuttal to Schoemaker’s claim, members of our faculty have served on corporate boards and have held high level management positions with small, medium, and large companies. An informal study of the professional backgrounds of 11 tenured and 10 tenure-track full-time faculty members revealed the following about their experience:

- 3 held C-level positions (2 CEOs and 1 CFO)
- 3 sat on corporate boards
- 7 were managers
- 8 served at the director or senior manager level
- 7 worked as vice-presidents
- 8 consulted for professional consulting firms
- 2 were military officers

Even more impressive is the fact that this represents a combined 265 years of business experience. These professors, who all hold doctorate degrees, also have an average of 12.6 years of work experience; only two of the professors in this group have less than five years of business experience. Additionally, our typical adjunct professor is an active practitioner in the profession directly related to the subject that they teach; and many full-time faculty maintain small consulting practices that allow them to keep up-to-date with developments in their respective fields. Our faculty members bring to their classrooms first-hand examples of real-life business leadership applications that provide relevant and meaningful learning experiences for our students.

The faculty members are our “experienced clinicians” and strike the perfect balance between rigor and relevance for graduate management education. Our faculty profile serves as the bellwether in response to the criticism that business school professors are out of touch with the
realities managers face in the workplace every day. They are true scholar-practitioners in that the combination of their academic credentials and business experience allows them to integrate the science of management with the practice of leadership. Thus, our professors are able to better prepare students for the complex organizational issues they will face on the job, without jeopardizing the legitimacy of the College of Business within the university setting (Clinebell & Clinebell, 2008).

CONCLUSION

We have developed a curriculum that we believe answers the criticisms of business education in a unique way. With our mission statement as a guide, we designed a curriculum that prepares our students to be competent and responsible managers who are also principled and moral leaders. Our emphasis on leadership is not based solely on courses, but pervades the entire program. Furthermore, our advanced integrative core requires students to synthesize and apply the functional knowledge they developed in the value creation core courses. This integration takes place in three courses: Business & Society, Global Strategy, and the Capstone Experience. This curriculum equips our graduates to address the technical problems of management and the adaptive challenges leaders face in the increasingly dynamic and complex environment of today’s global economy.

Henry Mintzberg (2004) argues that, “We need leaders with human skills, not professionals with academic credentials . . .” because managing “. . . is mostly about the soft stuff” (18, 41). By implementing leadership across its MBA curriculum, the University of Dallas’ College of Business is proactively developing students’ soft skills and has made great strides in responding to the call for business school graduates who possess the leadership skills needed by the organizations that hire them. In doing so, we have met our critics’ challenges head-on while remaining true to our practice-driven mission and our belief that understanding theory is necessary, but it won’t help our students succeed as leaders if they don’t know how to use it.

REFERENCES


