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TABLE OF CONTENTS

ENTREPRENEURSHIP & SMALL BUSINESS

*Identity and the micro-business*
Janice Black, Coastal Carolina University
Carol Megehee, Coastal Carolina University

GENERAL MANAGEMENT/ TECHNOLOGY/ MANAGEMENT EDUCATION

*Using knowledge, skills, and abilities (KSA) and stakeholder analysis*
Janice Black, Coastal Carolina University
J. Kay Keels, Coastal Carolina University
Darla Domke-Damonte, Coastal Carolina University
Barbara Ritter, Coastal Carolina University

HUMAN RESOURCES/CAREERS/GENDER & DIVERSITY

JOINT SESSION: HUMAN RESOURCES, CAREERS AND GENDER & DIVERSITY/ORGANIZATIONAL BEHAVIOR
A Multi-Level Analysis of Corporate Social Responsibility: Gender Differences and Corporate Strategies
Raymond J. Jones, University of North Texas
Brooklyn M. Cole, University of North Texas
Marcus Z. Cox, University of North Texas

Multigenerational Differences in the Puerto Rican Workforce.
Maritza Ivette Soto, University of Puerto Rico Rio Piedras
Maria V. Lugo, Bridgewater College

INTERNATIONAL / ORGANIZATIONAL THEORY / SOCIAL ISSUES

Revisiting Hofstede’s Dimensions: Examining the cultural convergence of the United States and Japan
Blaise J. Bergiel, University of West Georgia

Effects of National Culture on Joint Venture Performance and Duration: A Meta-Analysis
Furkan Amil Gur, Louisiana State University

The “Intelligent Expatriate”: The Role of Cultural Intelligence and Social Exclusion in Expatriate Turnover
Tobias Michael Huning, Columbus State University
John Finley, Columbus State University
Eva-Maria Huning, Columbus State University

Organization Development and Religion: An Examination of Fit or Mis-fit
Therese F. Yaeger, Benedictine University

Evaluating the Role of Risk in the Decision to Go Private: A Behavioral Approach
Alix Valenti, University of Houston - Clear Lake
Marguerite Schneider, New Jersey Institute of Technology

ORGANIZATIONAL BEHAVIOR

Lying, Cheating, and Stealing: I’m Just Trying to Help My Organization!
Julia Herchen, University of North Texas
Marcus Z. Cox, University of North Texas
Mark A. Davis, University of North Texas

Goal Orientation and Self-Defeating Behavior: The Mediating Role of Adaptive and Maladaptive Processes
Tobias Michael Huning, Columbus State University
Robert W. Renn, University of Memphis

Proactive Personality and Citizenship Behaviors: Exploring the Moderating Effects of Perceived Job Characteristics

Benjamin D. McLarty, Louisiana State University
Eric Liguori, California State University-Fresno
Jeffrey Muldoon, Louisiana State University

Person-Organization Forgiveness Motive Fit: Thriving With Congruence and Feigning Without

Bryant Thompson, University of South Carolina
Travis Simkins, Thunderbird School of Global Management

Coping Mechanisms in a Natural Disaster Context: A Multi-Focal Perspective of the Social Exchange Relationship

Juliana Lilly, Sam Houston State University
Meghna Virick, San Jose State University

ORGANIZATION DEVELOPMENT/ CONFLICT MANAGEMENT

Prepare to Adapt: Environmental Impacts That Challenge Organization Inertia

Leslie McKnight, Benedictine University-Springfield

STRATEGY / PUBLIC & NONPROFIT/ HEALTH CARE MANAGEMENT

Differential Effects of Pre- and Post-Acquisition R&D Expenditures on Post-Acquisition Performance

Son A Le, Louisiana Tech University
Khai T Nguyen, Louisiana Tech University
Kyungmoon Kim, Louisiana Tech University

Intrepreneurial Leaders and Performance

Janice Black, Coastal Carolina University
Nicholas W. Twigg, Coastal Carolina University
Michael Latta, Coastal Carolina University

Balancing Medicaid, Uncompensated Care and Quality

Jeffrey Helton, University of Texas School of Public Health
Proactive personality and career future: Testing a conceptual model and exploring potential mediators and moderators

Veena P. Prabhu, California State University, Los Angeles, vprabhu@calstatela.edu

Antecedents of pre-training motivation: a view from situational perspective

Khai T. Nguyen, Louisiana Tech University, ktn003@latech.edu
Kyungmoon Kim, Louisiana Tech University, kmk023@latech.edu

Simulations for strategy courses: Comparing us and eu courses

Larry Chasteen, University of Texas at Dallas, chasteen@utdallas.edu

DEVELOPMENTAL PAPERS

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Upper Echelon Theory and the role of National Culture,
Codou Samba, University of Houston

Cliques, Centrality, and Performance,
Tiffany Maldonado, University of Houston

Is Diversity the Opposite of Similarity?
Charles Engelhardt & Patrick Draves, St. Leo University

Intangibles, Real Options, and the Resource Based View: The impact of Market Frictions on Valuing Distinct Resources,
Daniel Reimsbach & Bastian Hauschild, Heirich Heine University

A Bayesian approach to Real Options Theory for the Startegic Management Literature,
Furkin Amil Gur, Louisiana State University

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Madeline Crocitto, State University of New York – Old Westbury
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Codou Samba, University of Houston

Cohesion and knowledge sharing in virtual teams: Redefining cohesion in the virtual world,
Brookly Mackenna Cole, University of North Texas

The relationship between perceived fairness of social networks and social exchange relationships,
Tiffany Maldonado, University of Houston

More information is good right? Increasing the use of Bayesian statistics for decision-making in the strategic management literature,
Josh Bendickson, Louisiana State University

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Marcus Z. Cox, Josh Daspit, Raymond J. Jones, & Phillip Davis, University of North Texas

Mentors
Nicholas W. Twigg, Coastal Carolina University
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Workforce motivation in the 21st century: An integration of expectancy theory and perceived organizational support,
Codou Samba, University of Houston

How much flexibility is needed for satisfaction with flexible benefits?
Tiffany Maldonado, University of Houston

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Patricia Holahan & Kai Wang, Stevens Institute of Technology

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Kelly Fisher, Texas A & M University – Kingsville

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IS THERE A TRINITY OF KNIGHTIAN UNCERTAINTY, INNOVATION AND CONTROL STRATEGIES?
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ABSTRACT
Knightian and other uncertainty is a prevalent notion in entrepreneurship and strategy making. There is lack of accurate but tangible formal descriptions for the mostly verbal classifications of uncertainty. This study suggests a model for different types of uncertainty that allows formal investigation of contexts. It theoretically explores the link between innovation and Knightian uncertainty from a strategic perspective. The impact of two strategy types to deal with uncertainty, prediction and control, on innovativeness of outcome is explored for the examples of causation and effectuation. The analysis suggests that these strategies conceptually vary in their achievable innovativeness of outcomes.

INTRODUCTION
Uncertainty is a pivotal factor for strategy making in order to create a sustainable advantage for a firm (Grant, 2003). In a changing environment, firms need to react by adaption and innovation of technologies, markets, processes and structures. However, a deviation from the status quo poses the challenge of unexpected or unpredictable events and effects, making the firm subject to uncertainty (Sommer & Loch, 2004). Uncertainty poses challenges to business strategy and operations, and has practical consequences for firm management as it can significantly impact relevant processes (Sharon A Alvarez & Barney, 2005), e.g., in project management (Pich, Loch, & De Meyer, 2002). Managing uncertainty effectively is crucial for success in entrepreneurship and other domains of high uncertainty, e.g., R&D or Business Angel investing (Brettel, Mauer, Engelen, & Küpper, forthcoming; Wiltbank, Read, Dew, & Sarasvathy, 2009). Hence, strategies to deal with uncertainty remain of high interest to researchers and practitioners alike.

A comprehensive view of the environment and the uncertainty therein is required to assess the appropriateness of a strategizing approach. Wiltbank, Dew, Read, & Sarasvathy (2006) develop categories of positioning and constructionist approaches to strategy making in relation to
uncertainty, depending on the different emphasis on prediction and control. However, so far the categories of prediction and control strategies have only been identified and distilled, leaving the question “[w]hat are the advantages, if any, of not trying to predict the future?” (Wiltbank, et al., 2006, p. 993) largely unanswered. We explore this question further by exploring a link between different levels of uncertainty, innovation and causation and effectuation strategies as representatives of prediction and control strategies (Sarasvathy, 2001).

Innovations are important for firm survival. For example, development of new businesses and product lines are critical for the competitive position of a firm, and are based on breakthrough innovations (McDermott, 2002). However, innovations are also a source of uncertainty, while uncertainty in turn is a barrier to innovation as people prefer outcomes with known probabilities (Brettel, et al., forthcoming; Ellsberg, 1961). We aim to shed light on this feedback loop by an investigating effectuation as a strategy intended to act foremost under uncertainty and its counterpart causation (Sarasvathy, 2001), by taking an innovation perspective.

Wiltbank et al. (2006) indicatively mention potential advantages of constructionist strategic approaches (such as effectuation) in their emphasis on creativity and entrepreneurship as elements of strategizing. Innovativeness has been considered together with effectuation and causation as a proxy for uncertainty as moderator in the relation to performance (Brettel, et al., forthcoming), but not as dependant variable. We take these ideas further and explore the potential of effectuation and causation approaches to create radically innovative outcomes.

Also from a more technical perspective, approaches to model uncertainty, especially Knightian uncertainty (Knight, 1921) remain of current interest. Still recently, new advances are made despite the long history of research since the introduction by Knight (see Dequech, 2000 for a good overview), both mathematically (Stecher, Shields, & Dickhaut, 2011) and in computer science (Kelton, 2006). To our knowledge, literature on modeling Knightian uncertainty remains on this rather technical level, indicating a lack of formal, accurate but tangible descriptions for the mostly verbal classifications of uncertainty that prevents further investigation. We aim to fill this gap by presenting a new formal description for the different kinds of uncertainty in an event space model. While our model provides an illustration pragmatic and graphic enough to allow easy understanding and linkage to real world problems such as markets or products and stimulate discussion, it is formal enough to serve as a basis for more technical use, e.g., in computer simulation.

Our study aims for the following contributions to the literature on uncertainty, innovation and strategy. We present a model environment for different types of uncertainty. We theoretically explore the link between uncertainty and innovation types. We then investigate the link of effectuation and causation as uncertainty management strategies to innovation and develop propositions on their innovation performance in this regard.

**CONCEPTUALIZATIONS OF UNCERTAINTY**

Despite the importance of the construct, literature uses confounding terms to describe the levels of certainty; specifically, definitions in mainstream economics differ from the ones at interest
here. It is not the purpose of this paper to delve into mathematical differences of uncertainty definitions and their link to economic or decision theories (e.g., standard subjective expected utility); for a good elaboration see Dequech (2000). For this article, we use the following definition for uncertainty levels, but shortly mention related terms to embed it in the literature. Under certainty, there is only one possible outcome associated with an action, and it is known beforehand. If there can be more than one outcome, only the possible outcomes might be known with certainty before the decision for an action is made. This changes the decision making context to either risky or ambiguous, depending on predictability (Wiltbank, et al., 2006). Simply put, “if the outcomes of a decision are not certain, then they are either risky or uncertain.” (Sharon A Alvarez & Barney, 2005, p. 779) In a risky context, the probability of each possible outcome is known and can be used to estimate, i.e. predict, overall outcome probability distributions as guidance for decision making (Sharon A Alvarez & Barney, 2007). In an ambiguous context, while there is a clear definition of what might be the possible outcomes of a particular course of action, i.e. the range of the outcome variable is known, predicting the probability of the different outcome values is not possible (Dequech, 2003). Under true or Knightian uncertainty, even the possible outcomes of an action (the range of the outcome variable, the very variable instances) are unknown before a decision is taken (Knight, 1921; LeRoy & Singell Jr, 1987; Wiltbank, et al., 2006).

In the literature, the term “uncertainty” is often not differentiated into ambiguity or Knightian, both in theoretical articles as well as in measurement constructs of empirical studies (e.g., Brettel, et al., forthcoming). Both the terms used to describe “uncertainty” as well as the understanding of ambiguity and Knightian uncertainty are confounded in literature streams of entrepreneurship (“true” or “unforeseeable” uncertainty), sociology (“strong” or “fundamental” uncertainty), economics (“unawareness” or “unforeseen contingencies”), decision theory, engineering and project management (“unknown unknowns” or “unks-unks”) and even public policy (“wicked problems”) (Dequech, 2003; Loch, Solt, & Bailey, 2008; Pich, et al., 2002; Sommer & Loch, 2004). We diligently elaborate on the differentiation of Knightian uncertainty as used in this article as this is crucial for our purpose. For a situation to be not of Knightian uncertainty, all the possible events (the event space) have to be known beforehand and the states of nature are predetermined (Dequech, 2000). This means that not only the variables defining the event space but also their ranges are known in advance. Knowledge of the probability distribution then determines if the situation is risky or ambiguous. If there is sufficient information available about the potential set of outcomes to reliably estimate a probability distribution ex ante, the risk is “known”, while Knightian uncertainty and ambiguity constitute situations of “unknown risk” (Sharon A. Alvarez & Parker, 2009, p. 215). In turn, under Knightian uncertainty, the event space is not predetermined. This means that even the variables which define the event space are unknown – “the very instances are unclassifiable” (Wiltbank, et al., 2006, p. 988). The intermediate case that the variables of the event space are known but their ranges remain unknown has not been differentiated to our knowledge. We dismiss it for now and will elaborate on the distinction when we link it to definitions of innovation.

Note that Knightian uncertainty is less clearly defined by the amount of information available in the environment as shown by differing definitions, as information can also be regarded as unknowable (and thus at least practically inexistent) for ambiguity. Under Knightian uncertainty,
probabilities are also unknowable from experience or observation as the required information simply does not exist at time of decision. However, ambiguity in some definitions is a situation where probabilities about the environment can be learned and updated in a Bayesian way (e.g., Dequech, 2000; Dew, Sarasvathy, & Venkataraman, 2004), whereas others go to great mathematical lengths to exclude this possibility of convergence of observed and actual probability distributions (Stecher, et al., 2011). A differentiation by the informational situation is hence unclear. We advocate as alternative differentiation via inclusion of the possibility for newness – the constructionist aspect of Knightian uncertainty. However there are also some models that include doubt about the range of possible events for ambiguity, in above definition a case of Knightian uncertainty (e.g., Mukerji, 1997, cited in Dequech, 2000). A distinction by predictability of the environment is also not sufficient to differentiate Knightian from “regular” uncertainty. Both ambiguity and Knightian uncertainty do not allow fully anticipating or predicting the future.

A SPATIAL REPRESENTATION OF UNCERTAINTY

Our article focuses on situations of Knightian uncertainty and ambiguity, contrasted to simple uncertainty. We shortly review previous models of Knightian uncertainty and then sketch a model environment that allows to formally discussing uncertainty phenomena and effects. The model should allow for better tractability of the phenomena and effects proposed.

Previous Models Of Uncertainty

How to correctly model and generate uncertainty is an issue that has been receiving attention in research for more than half a century, but is still debated in literature of different streams, foremost mathematical. In his seminal experiment, Ellsberg (1961) created a situation of ambiguity by withholding information from participants in a laboratory information. More recent articles focused on the statistical problem of random distribution generation for use in laboratory experiments (Stecher, et al., 2011) and random number generation for computer simulation (Henderson & Nelson, 2006; Kelton, 2006). The mentioned studies are mainly concerned with the issue that simple random number generators are not “random enough” to fit the requirements of ambiguity or Knightian uncertainty, as they are eventually creating repetitive numbers or number streams whose distribution can be gauged from experience, and propose mathematical and technical solutions to address this problem. Note that according to our definition, the mentioned studies address ambiguity, as the distributions’ variables and their ranges are known ex ante.

Literature on modeling Knightian uncertainty remains on this rather technical level. To our knowledge, no “tangible” model for Knightian uncertainty, i.e. a model world that can easily be more directly linked to real world problems such as markets or products has been published. We next sketch such a model for uncertainty that can be used to describe uncertainty contexts including ambiguity and Knightian uncertainty.

Basic Model
Without restricting generalizability, our model world describes supply and demand of products. All products (supply) and product preferences (demand) are described by vectors of \( n \) dimensions (n-tuples). Each dimension variable has an associated variable range. We assume the basic world (event space) to be 2-dimensional, and both dimensional variables \( x \) and \( y \) to range from 0 to 5. A supplied product or demand preference is then described as a vector \(<x,y>\) where \( x \in [0, 5] \) and \( y \in [0, 5] \). Demand of consumers is a demand cloud of discrete demand dots in the spanned 2-dimensional plane (vector space), and product offerings form a similar cloud. If supply meets demand in the vector space at a specific position, the product is sold. Figure 1 shows the basic model with a small illustrated demand cloud in the plane.

Although presented as a supply and demand model, our model is generic enough to describe any elements of the macro- and micro-environment of a firm as described by strategic management literature. The micro-environment includes sectors which directly impact a firm’s business strategy, such as customers, competitors or suppliers, while the macro-environment consists of environmental, political or technological regimes that set the larger stage for micro environments (Porter, 1980; Vecchiato, forthcoming).

**FIGURE 1: Event space in the basic 2-dimensional model**

![Event space in the basic 2-dimensional model](image)

**Risk, Ambiguity And Knightian Uncertainty In The Model**

Under certainty, the elements (outcomes) of the demand cloud in the model are known and do not change – the positions of the dots in the plane do not change. Under risk, the demand dots can be in several locations. The possible locations and their associated probabilities are known, so that for a given product idea, the expected demand value can be calculated based on these probability distributions and a decision between different product ideas can be made. Under ambiguity, the probability distribution for the known possible dot locations is unknown. Hence decision-making based on a simple expected value is not possible.

Under Knightian uncertainty, the possible outcomes, i.e. the potential locations of the dots are unknown; more specifically, even the range of locations that they can have are unknown before a decision is taken, i.e. before the product is launched on the market. Knightian uncertainty is
about “things out there [that] are not on the horizon at all” (Loch, et al., 2008), about “space that is off the map” (Hamel & Prahalad, 1989, p. 74 cited in; Wiltbank, et al., 2006). There are two possible representations of increasing the uncertainty level above ambiguity to reflect this in the model. The span of an axis defines the range of the respective outcome variable. Under Knightian uncertainty, the range or very instances of the outcome variable (the parameters of dots’ n-tuples) are not known beforehand. One representation of Knightian uncertainty is hence the possibility that the span (variable range) of an existing given axis can expand, opening up new variable instances and thus space on the map where new demand dots can then emerge, or existing ones move to. Figure 2 illustrates such an extension of the range of variables of the x-axis. An example for a variable range extension would be that a product characteristic “engine power” is pushed beyond limits thought possible by a supplier on the market, extending the range of the engine power axis.

FIGURE 2: Illustration of axis extension creating Knightian uncertainty in the model

An alternative and more radical representation of Knightian uncertainty is the possibility for additional dimensions to emerge, drastically enlarging the event space of possible outcomes. For example, a new product characteristic could be invented and possibly become of importance to the customers, e.g., a backlight behind television flat screens as introduced by Philips (the “ambilight”) in 2004. Figure 3 illustrates the evolution from a two-dimensional plane to a three-dimensional space in the model. Note that for a condition of Knightian uncertainty, the possibility that new space is opened up in the model is sufficient; the realization thereof is not necessary.

FIGURE 3: Illustration of additional dimension creating Knightian uncertainty in the model
Incremental And Radical Innovation

Innovation can be defined as “new technologies (or previously untried combinations of technologies) focused on either latent or well-known needs” (McDermott & O'Connor, 2002, p. 426). It requires the creation of a new product, service or process. Newness (to the firm, outside world or both) ranges from totally or radically new to incremental or minor adjustments or improvements of a product, service or technology (de Brentani, 2001). While radical innovations “are perceived as totally different and require major changes in thinking and behavior on the part of customers or that involve dramatic leaps in terms of customer familiarity and use“ (de Brentani, 2001, p. 170), incrementally innovative products provide few or no new values for customers. Newness thus differentiates between radical (or discontinuous) and incremental innovation. Although newness might come in variation, we dichotomize new products into radical and incremental innovations from the existing state of the world for better explicability. The shift from piston aircraft to turbojet engines or the move to semiconductor memory are examples for radical innovations from breakthrough inventions (McDermott & O'Connor, 2002). A more recent example could be the rise of social networking (facebook.com etc.), the proliferation of e-mail or the mp3 standard for digital music storage and trade.

Radical innovations are important to the long-term success of firm (McDermott, 2002). They are widely believed to enable a firm to reap superior profits or gain major competitive advantages, but involve higher risk and uncertainty levels than incremental innovations which typically achieve lower returns but a higher success rate due to their fit with a company’s capabilities and means (de Brentani, 2001). Radical innovations are by far less frequent than incremental ones (about 1 in 5 new product introductions), which shows that they are difficult to create; possibly the time in-between them is sustained with incremental innovations (de Brentani, 2001).

Uncertainty And Innovation

Apart from changes in the macro-environment of a firm, e.g., the occurrence of political, regulatory or cultural changes that cause dramatic behavior and thus demand changes, Knightian uncertainty can occur in the micro-environment of existing markets already due to *complexity*
from conflation of otherwise known and predictable factors (Loch, et al., 2008). We focus on innovation and newness of products and markets as another major source of uncertainty in the micro-environment.

Innovation has been connected to uncertainty in various research streams and fields. Schumpeter’s process of creative destruction and subsequent innovations is an example of creativity and structural change in economics, but the connection between innovations and more radical uncertainty is also made in the Neo-Schumpeterian literature and some strands of Austrian and new institutional economics (Dequech, 2000). Ellsberg (1961) already associated ambiguity with innovation, although it is unclear if he meant ambiguity or Knightian uncertainty according to our definition.

New markets for new and thus innovative products and associated opportunities are frequently referenced as situations of high uncertainty, since reliable information about these situations is likely to be very limited. Newness, e.g., new market requirements or customer groups, can be a major source of uncertainty, e.g., in product development (Brettel, et al., forthcoming; Dew, Velamuri, & Venkataraman, 2004). For example, customers might use an innovation in an originally unintended way (Dew, Sarasvathy, et al., 2004), or an unexpected customer segment might turn out to be a valuable target group.

Potential for innovation hence is a source of uncertainty. Dequech (2003) mentions “possibility of creativity and structural change“ as causes for Knightian uncertainty. Disruptive innovation or other contingencies might change existing markets from risky to being uncertain (Christensen, Anthony, & Roth, 2004). A prominent example might be the previously mentioned invention of the mp3 digital music file format that revolutionized the music business and affected all adjacent markets from electronics manufacturers to artists.

Types Of Innovation And Levels Of Uncertainty

Comparing innovation types with uncertainty types, a similarity becomes evident. The introduction of new or the extension of the range of existing variables required for Knightian uncertainty is a change that can be caused by an innovation. Especially the introduction of a new dimension fits the idea of a radical innovation, as “Knightian uncertainty refers to the actual instance of innovation […] as unclassifiable […]” (Wiltbank, et al., 2006)

For the weaker case of extending the range of an existing variable, the matching with either an incremental or radical innovation as potential source depends on the magnitude of change. An incremental extension of the variable within a tolerance margin of what is deemed theoretically possible might possibly be caused by an incremental innovation. Such continuous or evolutionary development can be caused by new products involving minor changes or simple improvements in technology, imitations or line extensions, which are characteristics of incremental innovations (de Brentani, 2001). A large enough push of the variable range beyond limits deemed even remotely possible before and with disruptive consequences would fit the definition of a radical innovation of true novelty of breakthrough ideas or developments in technology, or completely new product categories (McDermott & O’Connor, 2002). We hence term the zones of Knightian uncertainty in our event space model, shaded grey in figure 2 and 3,
“innovation zones”. We conclude that although Knightian uncertainty can be caused by other factors, innovation is a source of Knightian uncertainty in the micro environment of a firm. Ambiguity in comparison does not allow for radical innovation, but for incremental innovations within the known variable ranges, such as from recombination of existing technologies and product characteristics.

UNCERTAINTY MANAGEMENT STRATEGIES AND INNOVATION

Non-disruptive innovations can support established industries but often growth is limited by market needs. There is an endogenous pressure for innovation, stimulated by competition (Dequech, 2000). Disruptive innovations are then needed to redefine the value proposition of an industry for continuous sustainable profits (Christensen, et al., 2004). Hence, innovations will occur and their consequences need to be managed with appropriate strategies. Managing Knightian uncertainty is critical for new ventures (e.g., Loch, et al., 2008). In turn, as innovations are closely linked to uncertainty, management strategies intended to cope with uncertainty might differ in innovativeness of their outcome.

Different types of innovation entail a substantially different new product development scenario and thus strategy (de Brentani, 2001). In the following, we explore if there is theoretical evidence that this link can be reverted – in that the choice for a strategy already implies the innovativeness of the outcome. For example, a strategy that aims to reduce uncertainty possibly might reduce also innovativeness over a strategy that does not, or vice versa. We explore this for two representatives of different strategy groups closely linked to uncertainty, causation and effectuation for prediction and control strategies (Wiltbank, et al., 2006), by exploring their impact on innovativeness. A short introduction to prediction and control strategies is given in appendix 1.

Effectuation, Causation and Uncertainty

Effectual logic consists of a system of principles that drive a dynamic and interactive process for the creation of new ventures and markets (Sarasvathy & Dew, 2005). Effectual behavior chooses between possible effects creatable from a given set of means (Sarasvathy, 2001). Effectuation is contrasted to its counterpart causation, which embodies the classic management, planning or strategy approach. Causal (non-effectual) behavior takes a planned effect as given and chooses between possible means to reach it. Causal behavior tries to control outcomes and manage uncertainty by predicting the future with techniques such as forecasting and scenario planning, while effectuation focuses on establishing partnerships and commitments through a dynamic creation process (Sarasvathy & Dew, 2005; Vecchiato, forthcoming). Opposed to its causal alternative, which highlights prediction of the future as its governing element, effectuation focuses on controlling the future: “[T]o the extent that we can control the future we do not need to predict it” (Sarasvathy, 2001: 251). Effectuation can hence be classified as a strategy of non-predictive control (Wiltbank, et al., 2006).

The effectual logic explicitly includes the case of Knightian uncertainty in its problem space (Sarasvathy, 2001, 2008). Use of effectuation has been positively related to uncertainty
(Chandler, DeTienne, McKelvie, & Mumford, 2011; Dew, Read, Sarasvathy, & Wiltbank, 2009; Read, Dew, Sarasvathy, Song, & Wiltbank, 2009). There is also evidence for a positive performance impact in specific and highly uncertain environments, e.g., new ventures (Wiltbank, et al., 2009) and corporate R&D departments (Brettel, et al., forthcoming), whereas causation seems to be superior under certainty. We briefly explicate the uncertainty reduction effect of effectuation for two of its elements, the forming of partnerships with and commitments from stakeholders and the affordable loss principle (Sarasvathy, 2001). Collected commitments are fulfilled independent from the evolution of the world, and can hence be considered certain. The affordable loss principle postulates to spend only what you can afford to lose without risking economic survival, offering protection against bankruptcy. Adhering to these principles thus converts action in face of Knightian uncertainty from a bet to a small but certain protected niche. Effectuation also contains elements of identifying own means and capabilities in addition to forming partnerships in order to reduce uncertainty, elements that have also been suggested as tools to reduce the overall risk associated with radical innovations and thus Knightian uncertainty (McDermott & O’Connor, 2002).

**Effectuation, Causation and Innovation**

Prediction strategies have been argued to achieve less creative solutions as their pre-selection of goals “reduce[s] the size and dimensionality of their problem space” which leads to fewer generated alternatives and thus lower potential creativity for problem solving (Wiltbank, et al., 2006). We take up this thought for causation and effectuation and evaluate their behavior with an innovativeness perspective in the context of the event space as described in our model as problem space. For innovation to occur, the sketched “innovation zones” of Knightian uncertainty in the event space have to be reached. We assess if the zones can be reached by both causation and effectuation. In our thought example based on the model, zones can be entered by developing and launching a product that has characteristics that position it into the zone. We hence analyze product development outcomes for the two strategies based on the processes described by Read et al. (2009).

Product development can more abstractly be described as a goal-finding process. Goal-finding differs significantly for the two strategies. Causation develops a product by creating a prediction of demand (the expected location and quantity of demand dots) and then optimizing the initial product idea so as to maximize fit with the predicted market. The prediction is based on market research data, either historic or current, most probably obtaining information on the current or self-reported future position of a sample of demand dots and then extrapolating it to the whole market.

Basing a prediction on current or historic values restricts the outcome range to the space spanned by those values, and extrapolations thereof. For example, to predict future demand preferences for car combustion engine power, an extrapolation of a historic positive trend towards more powerful engines might yield a predicted future demand above the current limit deemed technically possible. If this trend is to be capitalized on by providing such engines, they need to be developed which requires an *incremental* innovation in the dimension of engine power. If trend extrapolation does not lead to a prediction outside the existing variable range, no
innovation in this sense is required to meet predicted demand (it could still require a recombination of existing factors), and hence no capital will be invested in innovation efforts as it cannot be justified by return projections.

Causation can hence lead to incremental innovations. However, predictions based on historic or current data cannot yield a projection of the introduction of a new product characteristic that was not possible before, i.e. a projected demand cloud located in the grey zone of figure 3. Radical innovations cannot be predicted before they are made, as their very occurrence is uncertain and they are unknowable ex ante. For example, the extrapolated engine power trend might prove correct, but demand might shift to similarly powerful but far more eco-friendly electric vehicles after a radical innovation led to drastically lower production cost of batteries, eliminating most of the demand for combustion engines.

Note that even if a prototype for an innovation existed, it still has to be launched on the market first to assess its real potential. Market research based on asking customers if they would buy a radically innovative product unknown to them might provide only inaccurate data due to unforeseen effects. Customers might not be able to gauge their future preference for a product – think about if you would have said you would use social networks as much as you do now if someone would have shown you a prototype of Facebook or Twitter just a few years ago. Also, customers might use products in an unintended way creating additional unpredictable demand.

We conclude by proposing that if the basis for goal-finding is prediction-based as in causation, it will likely only yield incrementally innovative products.

In contrast to causation, in the effectuation processes, goals are set based on the outcome of the interactions with stakeholders that self-select into an effectual network of commitments (Read, et al., 2009). The product idea is developed by gradually adjusting it to the constraints imposed by personal goals of new stakeholders that join, who in return engage in commitments of resource provision for taking the artifact to market or guarantee purchase quantities. In this process, the possible product outcome space is also spanned by the goals of participating stakeholders, and the above described logic that the potential for innovativeness is limited by the product demand or idea data from customers or stakeholders can be transferred. But how are then radical innovations possible? The idea for a new innovation or suspected demand for such has to come from somewhere. Let’s assume that the idea exists and both strategies can “see” this idea through their prediction or stakeholder search activities, i.e. as product ideas rooted in customer or stakeholder responses. The difference hence cannot lie in different knowledge. Instead, we argue that differences in the evaluation of the idea for the decision to pursue it or not are decisive. We explore this for above case of electric vehicles.

A customer or stakeholder (stakeholders can be customers (Sarasvathy, 2001)) indicates his or her interest in electric vehicles for a payable price which today is not achievable. His or her demand dot (or suggested product dot) would be registered in causal market research. However, the investment case for the respective product development would be less attractive than others for more common products targeting mainstream demand, because the demand (mainly consisting of users whose demand stays stable) would not justify the required investment to develop such a radically innovative product, especially when risk-adjusting the projected return.
for the high uncertainty and failure risk associated with such a development. The idea would hence not be pursued due to consideration of high opportunity cost.

If an effectual stakeholder had the same goal of using or producing affordable electrical vehicles and is ready to engage in commitments for its realization, the idea might be incorporated into the effectual network’s goals, provided it does not conflict with the other network goals. It is not evaluated based on demand projections or opportunity costs of other product ideas, but rather has to satisfy the restriction of an investment whose loss is still affordable (Sarasvathy & Dew, 2005). Effectual stakeholders explicitly acknowledge that the revenue from engaging in such an innovation is unknowable, and hence the investment case incalculable. The stakeholder’s commitment in return for the incorporation of his or her product idea (goal) is, however, certain, and will be pursued if possible. An entrance into the zone of radical innovation is hence possible, and the innovation will be realized if the product development turns out successful and is affordable.

We thus propose that effectuation processes can lead to radical innovations while outcomes of causation processes are restricted to incremental innovations, due to the difference in evaluation of product ideas. Note that realized innovativeness still depends on a successful implementation of the aspired innovation. What we argue is that if radical innovations are excluded ex ante due to a limitation of the event space to what can be predicted, the associated potentially extraordinary returns cannot be achieved.

**DISCUSSION**

**Theoretical Implications**

This paper investigates links between Knightian uncertainty, innovation and prediction and control strategies. Our considerations contribute to the literature on the juncture of uncertainty, innovation and strategy in several ways. First, definitions of uncertainty levels, especially ambiguity and Knightian uncertainty differ greatly in literature and accurate mathematical representations are still a current topic of research. We review definitions and their use and present a simple graphic model world to describe different levels of uncertainty in a tractable way. The model provides a formal basis for discussion and future analysis, for example in the environment of computer simulation research. It also is a step towards facilitating the communication and illustration of arguments between economists of different thought schools, as the model allows a tangible but accurate distinction between ambiguity and Knightian uncertainty (Dequech, 2000). Second, this paper establishes a link between uncertainty levels and incremental and radical innovation types. One important aim of strategy is to find or create space that is “off the map […] uniquely suited to the company’s own strengths.” (Hamel & Prahalad, 1989, p. 74 cited in; Wiltbank, et al., 2006). The possibility that such spaces are found by oneself or other actors in the environment creates an environment of Knightian uncertainty. We argue that innovations can create such space. Especially radical or disruptive innovations fulfill the criteria of Knightian uncertainty as referring to creation of new variables and instances that were not known, knowable or deemed possible ex ante. Third, in the context of uncertainty and innovation as source thereof, we explore strategies to cope with uncertainty on
innovativeness of outcomes. Our study contributes to the discussion of the impact of prediction and control strategies on outcomes with regard to innovativeness. By investigating the link to innovation and Knightian uncertainty, we hope to make a contribution to building a “Knightian theory of the entrepreneurial firm.” (Wiltbank, et al., 2009, p. 131) The possibility that prediction and control strategies differ with regard to innovativeness has been mentioned briefly before. Building on recent theoretical underpinnings (Read, et al., 2009; Wiltbank, et al., 2006), we create propositions for effectuation and causation on their impact on innovativeness with the aim of providing further insights how strategy making under uncertainty is connected to creativity and innovation.

We propose that effectuation is more likely to produce radical innovations, and illustrate our argument along the presented uncertainty model. Specifically, we propose that causation is limited to pursuing incremental innovations, as projected risk-adjusted returns from ideas for radical innovations are not competitive due to their uncontrollable outcomes. This prevents causation actors to enter the zones of radical innovation in the model, while effectuation evaluates such endeavors based on different, less restrictive criteria. Assuming that entrepreneurial firms are more likely to act effectual (Wiltbank, et al., 2009), findings concur the suggestion that entrepreneurial firms are required to assemble resources to exploit uncertain opportunities such as innovations (Sharon A Alvarez & Barney, 2005). Thinking this idea of increased innovation one step further, applying specific uncertainty management strategies in environments of high uncertainty might fuel a re-enforcement mechanism of higher innovativeness of outcomes which then increase uncertainty in the environment and the use of uncertainty management strategies. Furthermore, effectuation might have additional benefits from a macro-economic point of view, in terms of wealth creation from innovation. Our findings do not contradict the notion of endogeneity of the environment based on a constructionist view of one’s actions as reason for widest possible innovation range of control approaches (Wiltbank, et al., 2006) but suggest that the difference in pursued opportunities can be specifically attributed to the difference in evaluation criteria of opportunities of prediction and control approaches. Evaluation criteria embedded in effectuation logic could then be a result of the applied school of thought.

Finally, our findings are consistent with and provide further perspective on the theoretical suggestion and recent evidence of use of effectuation even within causal environments. Wiltbank et al. (2009) suggest that corporate managers ought to reconsider their predictive approaches for cases of new ventures or to reap benefits of control approaches by creating “effectual cells” within causal environments for the early incubation stages of new venture projects. Our study suggests that apart from uncertainty reduction, higher innovativeness of outcomes could be a motivation to pursue an effectuation strategy and to establish “effectual cells”.

**Avenues for Further Research**

Our considerations have several implications for theory and research. Much additional research must be done to further explore the link between uncertainty, innovativeness and prediction and control strategies. In a radical formulation, we propose that to achieve radical innovations, a movement away from classic causal goal (e.g., investment opportunity) evaluation is required to
allow radical innovations to happen – as is done by effectuation. The evidence found by Brettel et al. (forthcoming) of effectuation in an innovation-focused context of corporate R&D-departments concurs this notion. However, the study considers innovativeness as a measure for uncertainty only. Future studies of prediction and control strategies should consider aspired and achieved innovativeness also as outcome respectively antecedent of strategy choice, a notion that has been often overlooked also in innovation research (de Brentani, 2001). For example, many recent breakthrough innovations were delivered by young entrepreneurial firms or start-ups (e.g., Facebook or Google). Investigations if such firms have been employing effectual logic in their decision making and if less innovative firms did not could be an interesting starting point for future studies. Such research would provide validation for our findings and potential to further understand the use and impact of effectuation and causation strategies. In this context, exploring if the proposed connection to innovation is transferrable to other prediction and control strategies, and if the main driver is the emphasis on prediction or control, is an interesting avenue for further research. Efforts are also required in associated research involving uncertainty to better distinguish between uncertainty types. Previous studies often generally measure uncertainty but do not distinguish between Knightian uncertainty and other types. A differentiation is required as our link to radical and incremental innovation outcomes is contingent on distinguishing Knightian uncertainty from other uncertainty types.

**Practical Implications**

Our study connects Knightian uncertainty with innovation, strategy and entrepreneurship in a rather theoretical way. Nevertheless, practitioners ought to be aware that engaging in causation versus effectuation can have negative consequences in terms of innovativeness. When aiming for radical innovations, our study provides additional evidence that creating a space of “latitude” which fosters application of effectual processes could be promising. Furthermore, the presented uncertainty model could help better understanding the rather abstract differentiation between uncertainty levels, which might be useful to communicate with practitioners in teaching or workshops.

**APPENDIX**

**Prediction And Control Strategies**

Various strategy schools and approaches have been developed to address uncertainty in the form of ambiguity and Knightian uncertainty. Among others, strategies in the category of non-predictive control have been suggested as one way to successfully deal with uncertainty (Wiltbank, et al., 2006). Wiltbank et al. (2006) categorize strategizing approaches by two dimensions: emphasis on prediction and emphasis on control (figure 4). Approaches of low emphasis on control are termed positioning approaches. Distinctive is their view of the environment. They see the environment as exogenously given, including uncertainty effects that may arise. Accordingly, depending on their emphasis on prediction, they try to best position for the future by increased planning efforts to better anticipate the future (planning approaches) or adapting faster (learning) to a changing environment. However, in view of uncertainty, feasibility and quality of prediction deteriorate, conceptionally eliminating the link between
prediction and desired control to achieve goal finding. Alternative approaches of high emphasis on control aim to handle uncertainty in different ways, the constructionist approaches. According to their emphasis on prediction, this group divides into visionary approaches with a still high emphasis on prediction and transformative approaches that aim to achieve control by uncertainty reduction from individually created market niches.

FIGURE 4: Strategic management of uncertainty: Framework of prediction and control (own illustration based on Wiltbank, et al., 2006).

REFERENCES


IDENTITY AND THE MICRO-BUSINESS
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ABSTRACT

While research examining organizational identity and image has gained momentum in recent times, there is little recognition of the unique circumstances of the micro or small business where the entrepreneurial identity of the owner-manager, the organization’s image and reputation may be one multifaceted entity. This paper presents a theoretical perspective that integrates these literatures and presents some research propositions regarding the coherence or dissonance of these constructs for the micro-business owner-manager.

INTRODUCTION

As of 2007 (the latest date with complete information), micro-business, which include those with up to 4 employees (Schmidt & Kolodinsky, 2007), are about 92% of all the business firms in the United States (U.S. Census Bureau). These businesses only provide about 1% of the gross sales of the United States but involve about 20% of the workforce (U.S. Census Bureau, 2011). When this group of firms is expanded to include small businesses, which include those with up to 500 employees, they are 99.9% of all businesses in the United States (U. S. Census Bureau, 2011). These businesses are widely recognized as being major drivers of the economy. There has been increased examination of these businesses especially since the 1970s but there remain gaps and areas where researchers have not investigated the unique issues that face these firms. One such gap is in the area of the intertwining of identity across all levels found especially in owner-managed micro-businesses.

Given that 92% of all firms are in the micro-firm category, we address this need in our literature. We begin to examine this issue for these firms. We will examine identity, from three perspectives: the individual’s work identity, the owner-manager’s entrepreneurial identity; and the micro-organization. After presenting these three orientations, we present several propositions regarding potential implications from the alignment or not across the three perspectives.

IDENTITY

Identity is an enduring understanding about one’s self that guides one’s actions and provides definitions of acceptable boundaries of behaviors. It is central to how we make sense of what goes on (Weick, 1995). We will look at three identities often found in micro-businesses: The individual’s work identity, the entrepreneurial identity of the owner-manager, and the micro-organization identity.

The Work Identity

Since most entrepreneurs have five or more years of experience in their industry before starting or taking over a firm, we expect that most owner-managers of micro-businesses to have a pre-
Existing work related identity. We will first present the background of this individual level construct and then the implications for the owner-manager of a micro-business organization.

How work based identities develop in the first place was still an under-researched area as of 2006 (Pratt, Rockmann & Kaufmann, 2006). Medical professionals were examined for professional identity development and it was determined that a cycle of identity customization as various roles were performed in a structured training environment occurred (Pratt, Rockmann & Kaufmann, 2006). However, as the individual changes organizational roles, their work related identities also change (Ibarra, 1999).

Pratt and his colleagues (Pratt, Rockmann & Kaufmann, 2006) have suggested that it it the integration of work with an identity learning cycle that enables an individual to adjust their sense of identity with their work and in particular with their profession. The spark to change appears to be when one’s work role and basic identity have integrity violations. When that dissonance is experienced then people tend to customize their identity understanding. Upon receiving social validation of the customized work-identity, the individual applies it until the individual next experiences an integrity violation. Often the unfreezing of a past identity expectation and the refreezing of a new one may occur through the telling of stories. Stories act as the repository of acceptable ways to modify one’s sense of identity in the work place (Alvesson, 1994; Sveningsson & Alvesson, 2003). Furthermore, role models and peers play a strong role in the development of the work identity of the professional (Pratt, Rockman, & Kaufmann, 2006; Ashforth, 2001; Ibarra, 1999).

One’s work identity may be more like a gas or fluid in that it is always changing a bit to fit one’s current set of boundaries. Sveningsson and Alvesson (2003) are for a dynamic understanding of one’s work identity through the use of understanding the processes by which one is always crafting and recrafting just what constitutes that identity. They present the idea that the localized way of reasoning around a certain vocabulary emphasis found within an organizational context (the organizational discourse) impacts the way that the individual crafts their own identity. The main four areas of discourse that they argue impact managers are roughly globalization, creativity, external networks, and managerial controls. The main issues here is that these pressures then cause the manager to define and redefine their sense of identity.

Because the work identity is a sub-group of a social identity, it provides a feeling of inclusion and belonging. The more one identifies with the particular group, the more one’s membership in that group will shape the work identity or identities of the individual (“identities” because you can define yourself as belonging to a job role, a team, a department, an organization, an ad hoc committee and so forth). This allows for multiple legitimate organizational identities (Ashforth & Johnson, 2001; Meyer, Becker & Van Dick, 2006). Some may be transitory and only be in affect while being a member of a specific recognized group and others may result in the adjustment of one’s own self-concept so that it incorporates all or part of an organizational identity (Rousseau, 1998). This latter form is called a deep structure identity and is less malleable or cue dependent (Meyer, Becker & Van Dick, 2006).

Some sets of organizational identities may be in nested collectives and work to provide greater influence on one’s own self identity like being a member of a work group (which is a sub-group
of the organization). In these collective types of relationships, proximity (i.e., being close and/or having more contact) leads to self-identities that are closely tied to organizational identity (Ellemers and Rink, 2004; Meyer, Becker & Van Dick, 2006). Another set of identities, by their nature, may be dispersed (e.g., being a member of a profession and a member of an organization). In such a situation, the strength of the membership in the various groups will determine which group influences the individual more (Ellemers and Rink, 2004; Meyer, Becker & Van Dick, 2006).

The coherence across these identities of a single person and across the identities of various group members can be a critical issue especial in times of change such as during mergers and acquisitions (Clark, Gioia, Ketchen & Thomas, 2010). But not much work has been done evaluating the effectiveness of similarities and differences between the set of organizational identities present in an organization much less those present in a micro-business organization.

**The Entrepreneurial Identity**

Entrepreneurs and owner-managers have a new identity that is added to the list of the other organizational identities that they have acquired over the years; entrepreneurial identity. Entrepreneurial identity is a construct that refers to the personal identity of the entrepreneur/owner of a new small business (Down & Reveley, 2004). Entrepreneurial identity is developed as individuals differentiate themselves from their old environments and connect to their new environment as an entrepreneur (Down & Reveley, 2004; King, Clemens, & Fry, 2011) and is a way to legitimize who and what they are (Gioia, Price, Hamilton & Thomas, 2010). Entrepreneurial identity provides the owner-manager with a basis for decision-making and emerges from their conversations with others and to an extent with themselves (Karreman & Alvesson, 2001).

As entrepreneurs interact with others, their sense of identity emerges. In many family business entrepreneurial efforts, the actual sense of identity may not be that of the owner-manager but of the entire immediate family unit (Hamilton, 2006). In either case, the stronger and more prestigious interpersonal interactions with social network members to help them both align with certain industry standards and differentiate themselves from other similar organizational efforts (Jones & Volpe, 2011). This is particularly the case in rural small businesses which include about ¾ of the geographic distribution of the businesses in the United States (Shields, 2005). Thus, entrepreneurial identity is socially-constructed as they make sense of how to act in this new environment and so provides an ontological security (Giddens, 1991). Some have suggested that an idealized version of entrepreneurial identity is a source of entrepreneurial passion (Cardon, Wincent, Singh, Drnovsek, 2009; Murnieks, 2008). By implication then, the owner-manager’s identity and sense-making effort is a powerful initial influence on the establishment of an organization.

This sensemaking effort does not stop with the initiation of a business but continues on because of the need for continuous efforts to legitimize themselves and their organizations both for other members of the organization (Gibney, et al., 2011) but also for external stakeholders (Holt & Macpherson, 2010). Typically, this sensemaking occurs through the use of stories whether verbally, textually or visually (Holt & Macpherson, 2010). However, because of their unique
position of owner a firm, they construct more than just a personal identity foundation through sensemaking; entrepreneurs also provide sensegiving behaviors (Fehsenfeld, 2011). Thus, they also are instrumental in the construction an initial organizational identity (Hatch & Schultz, 1997; Ravasi & Schultz, 2006.). Indeed, as an organization grows and others join in the inside of the organization conversation, the organizational identity may further separate from the owner-manager’s personal sense of identity (Ybema, 2010).

For the micro-business owner, the entrepreneurial identity may in fact be moderated by the type of business that an individual is owning-managing. These two identities may really be one owner-manager—micro-business identity.

The Micro-Business Identity

Organizational identity both arises from the organization’s members and reflects how they understand their organization (Albert & Whetten, 1985). It is based on the patterning of shared meanings (Cornelissen, Haslam & Balmer, 2007). It represents the core concept of the organization and how that is put into action. Strategically, it helps various constituents in the achieving of the organization’s goals (van Riel & Balmer, 1997; Hach & Schultz, 1997). It also influences the actions of the organization members as they take on some of the characteristics of the organization to help define their identity within the organization (Dutton et al., 1994). Indeed, an organizational member may choose to make parts of the organizational identity integral to their own personal identity (Ashforth & Mael, 1989; Brown, 1997; Dutton et al., 1994; Elsback & Glynn, 1996; Elsback & Kramer, 1996). Organizational identity once communicated to members needs to be substantiated by the experiences of the organizational members (Harquail & Wilcox King, 2010) before it is fully accepted.

Organizational identity not only needs to be central to the organization’s reason for being and distinctiveness; but it must also endure across time (Whetten, 2006; Dutton, Dukerich & Harquail, 1994). However, it must also be flexible and dynamic to allow for unexpected changes in the organizational context (Cornelissen, Haslam & Balmer, 2007). Organizational identity provides a basis for further sensemaking and sensegiving during ambiguous situations (Mills & Weatherbee, 2006) because of the affect it has on how organizational members interpret issues (Dutton & Dukerich, 1991) and acknowledge threats (Elsbach and Kramer, 1996).

Organizational identity differs from organizational image. Organizational image is the best guess of organizational members of what organizational outsiders perceive an organization’s identity to be (Dutton et al, 1994). Organizational image and corporate identity ideally have much in common since corporate identity is the identity that is projected by the organization to outsiders (Cornelissen, Haslam & Balmer, 2007; Gioia & Thomas, 1996). Corporate identity is the accumulated shared set of perceptions of insiders about the organization but communication to outsiders will contribute to the construction of organizational identity (Dhalla, 2007). However, organizational identity in larger organizations is constructed in the separate understandings of various constituents of the organization (Hsu & Hannan, 2005) and thus may differ either intentionally or unintentionally.
In the micro-organization, the link between the owner-manager and any other organizational members is especially tight since the entire size of the organization is the size of a small group. It is no surprise that how the owner-manager talks about various strategic issues has tremendous impact on the micro-firm behaviors (Parry, 2010). Recent research has shown that the more successful of micro-businesses have high levels of self awareness about their strengths, weaknesses, opportunities and threats (Smith, 1999). This implies that the owner-manager of such firms most likely also is able to correctly communicate a clear organizational identity to their organization and a clear corporate identity to outside stakeholders. Thus, there is a greater likelihood that the organizational identity of a micro-business is very close to that of the entrepreneur’s affiliation with the particular industry that the organization is in, the organizational image and the corporate identity and perhaps with their personal identity as well.

IDENTITY CONGRUITY AND THE MICRO-BUSINESS OWNER-MANAGER

The owner-manager of a micro-business is expected to have a well developed set of identities from previous work experiences. If these work experiences were acquired in a larger firm, the owner-manager may have developed them through training programs, as well as, on the job learning experiences. Some additional sources of influences in the development of the work identities of the owner-manager may be somewhat unique for various types of micro-businesses. We will exam potential influences on the congruency of individuals’ work and organizational identities for individuals who are owner-managers of the following sub-categories: Certified Professionals, Artisans, Skilled Trades, Retailing and Hospitality.

Certified Professionals

Certified professionals are defined for this paper as being those professions that require a college degree, work experience and the passing of one or more nationally recognized exams. Examples of these professionals include: certified public accountants, certified managerial accountants, certified financial advisors, attorneys, medical doctors, among others. These individuals learn their work identities in a variety of contents beyond just that of a work environment. Thus, individuals in these micro-businesses learn about what it means to be a member of their profession as well as how their profession does its work. Such learning may occur in the formal educational processes or in the apprentice like work experience requirements for licensure. The cycling between the work expectations and processes and identity learning processes enables a fairly rapid identification process between the work site identity and the professional identity. Recall that part of the reason for an identity is to define “who you are,” as well as, “who you are not”. Because of the formal and “industry” standard developmental processes in such professions, we expect that for the micro-business owner of such a certified professional micro-business will have the following sets of congruencies among identities.

PROPOSITION 1A: A micro-business owner of a certified professional micro-business will have a work identity similar to their professional identity.
PROPOSITION 1B: Micro-business owners of similar certified professional micro-businesses will have work identities similar to each other.

PROPOSITION 1C: Micro-business owners of similar certified professional micro-businesses will have professional identities similar to each other.

PROPOSITION 1D: A micro-business owner of a certified professional micro-business will have a work identity and a professional identity similar to their personal identity.

Artisans

For this paper, artisans will be defined as individuals working in micro-businesses engaged in creative enterprises. These creative enterprises include artistic, cultural, technological or media oriented enterprises (Florida, 2002). These firms often provide other organizations with the creative edge that allows them to be distinctive (Rosenfeld, 2004). If a cluster of such organizations arises in an area, they may also attract talent-based enterprises or even tourists to these locations. Often once a colony of such activity is recognized; it will also attract people with higher levels of education. Since many of these clusters of creative enterprises develop in areas of low rent and other low overhead costs, they can be found in rural areas. In that case, they can many times act as additional income to traditional rural economy drivers such as agriculture (Rosenfeld, 2004). Such clusters often have three categories of individuals involved at the micro-business, and small to medium business levels. Category 1 consists of micro-businesses of artists, performers, writers, entertainers who basically offer one of a kind services (Rosenfeld, 2004). Category 2 takes these creative endeavors and scales them up to the size of small to medium businesses. In this category we find production-oriented enterprises that need some scale for operations like is found in larger scale making of pottery, movie production, and so forth (Rosenfeld, 2004). Category 3 businesses consist of the creative services. These services include design, displays, media, architects, advertising and interior decorators (Rosenfeld, 2004). This type of an owner-manager requires a social infrastructure with access to associations and foundations. You’ll find memberships in related creative guilds, or consortiums. There will be museums and foundations which support the creative work done by folks in this type of business. In most instances, individuals have a strong passion to do their creative endeavor and typically through education or training opportunities have focused their efforts on learning the work identities associated with the creativity as it relates to their area of interest in various fine arts and even crafts. Thus, for this type of a micro-business, we believe the following will be found about their work and artisan identities.

PROPOSITION 2A: A micro-business owner of an artisan micro-business will have a work identity similar to their artisan identity.

PROPOSITION 2B: Micro-business owners of similar artisan micro-businesses will have work identities similar to each other.

PROPOSITION 2C: Micro-business owners of similar artisan micro-businesses will have artisan identities similar to each other.
**PROPOSITION 2D:** A micro-business owner of an artisan micro-business will have a work identity and an artisan identity similar to their personal identity.

**Skilled Trades**

These types of micro-business owners are providing the various trade services needed by modern society. Here you’ll find your plumbers, carpenters, electricians, and so forth. Often many of these fields will have unions associated with them with formal training processes. Many times there are also state licensing exams associated with the trade. Many of these skilled trades can also be learned through vocational/technical schools of higher education. There is often a formal apprenticeship structure that is followed and is based on skills learned and tested for and certain levels of experience. We anticipate that there would be a similar cycling between personal, work and skilled trades’ identities as an individual goes through the training programs and the work experiences. Since training is shorter for each stage and is immediately followed by significant work experiences, we expect that there will be a more rapid assimilation of work identities and skilled trades’ identities and that these identities will be very similar. Most individuals who move into being an owner-manager have reached the highest trade recognized skill level which follows the old guild structure of a “Master” of their field. Thus, we expect any owner-managers to have strongly held work and skilled trades’ identities with more identification with being a member of their trade. We propose the following propositions.

**PROPOSITION 3A:** A micro-business owner of a skilled trades’ micro-business will have a work identity similar to their trades’ identity.

**PROPOSITION 3B:** Micro-business owners of similar skilled trades’ micro-businesses will have work identities similar to each other.

**PROPOSITION 3C:** Micro-business owners of similar skilled trades’ micro-businesses will have trades’ identities similar to each other.

**PROPOSITION 3D:** A micro-business owner of a skilled trades’ micro-business will have a work identity and a professional identity similar to their personal identity.

**Retailing**

The micro-business owner who is a retailer acquires products from suppliers and provides those products for sale at a mark up. These folks may have a passion for what they sale or it may just be a niche that they saw not being fulfilled by others. There is greater variation here than with any of the previous types of micro-business owners. Some retailers will have associated services provided as well. These services typically require the use of the products that the retailer is selling. The proportions of products and services offered may vary tremendously. Training for a retail micro-business may be obtained by getting a business degree or it may be obtained by work experience with other retailing establishments. In this type of an industry, there is little formal training just focused in creating a “retailers’ identity. Because of the relatively idiosyncratic ways of obtaining such knowledge, we expect there to be greater variations in the retailer’s identity; however, because there are very similar things required in a retail
establishment, we also expect that there will be similar work identities. Thus, we propose the following set of relationships between identity sets for the micro-business retailer:

**PROPOSITION 4A:** A micro-business owner of a retail micro-business will *not* have a work identity similar to their retailers’ identity.

**PROPOSITION 4B:** Micro-business owners of similar retailer micro-businesses will have work identities similar to each other.

**PROPOSITION 4C:** Micro-business owners of similar retailer micro-businesses will *not* have retailer identities similar to each other.

**PROPOSITION 4D:** A micro-business owner of a retail micro-business will have a work identity similar to their personal identity.

**PROPOSITION 4E:** A micro-business owner of a hospitality micro-business will *not* have a retailer identity similar to their personal identity.

**Hospitality**

The micro-business owner who is in an hospitality field provides goods and services around temporary living quarters and eateries. These folks may have a passion for their establishment or it may just be a niche that they saw not being fulfilled by others. We expect that there may be both greater variation in the backgrounds of such establishment owners and in the training that they have received to be in the hospitality industry. Training for a hospitality micro-business may be obtained by getting a business or hospitality degree or it may be obtained by work experience with hospitality establishments. In this type of an industry, there is little beginning to be more wide-spread formal training focused in creating a “hospitality” identity. Even in gaining work experience that are very wide differences between a large hospitality organization and the micro-business hospitality owner. Thus, we expect that there may be similarities between the hospitality identity and great variations in the work identities of the owner-manager of hospitality micro-businesses. Thus, we propose the following set of relationships between identity sets for the micro-business hospitality owner-manager:

**PROPOSITION 5A:** A micro-business owner of a hospitality micro-business will *not* have a work identity similar to their hospitality identity.

**PROPOSITION 5B:** Micro-business owners of hospitality micro-businesses will *not* have work identities similar to each other.

**PROPOSITION 5C:** Micro-business owners of hospitality micro-businesses will have hospitality identities similar to each other.

**PROPOSITION 5D:** A micro-business owner of a hospitality micro-business will have a hospitality identity similar to their personal identity.
**PROPOSITION 5E:** A micro-business owner of a hospitality micro-business will *not* have a work identity similar to their personal identity.

**DISCUSSION & IMPLICATIONS**

There has been little structured examination of the identities of the owner-manager of the micro-business in the stream of identity work being undertaken with such enthusiasm. This is true despite the number of micro-businesses that there are in the United States and, indeed, most communities found in the United States. This paper examines just how three categories of identities may be related to each other, the individual personal identity, the individual’s work identity and the organizational identity. The organizational identity and the industrial affiliation identity of the micro-business are assumed to be the same.

Better understanding the degree of congruence between identities and the performance and longevity of the micro-business may help us to better support the emergence of micro-businesses and the sustaining of them. As of this time, the sets of identities in use and their congruence remain an empirical question. To address this question, we will need to operationalize a way of examining these various identities and obtaining information about them in such a way as to make across individual, type of work processes and types of organizational/industry orientations. At this time we are exploring the idea of using a forced metaphor comparison technique. This method has been used successfully at the individual personality level (Woodside, 2008) and this may enable us to have similarly limited set of identity constructs at the work and organizational-industry levels.

We look forward to exploring this exciting area of investigation and sharing the results with the academic world to enable the extension of current identity research into this area. We also look forward to our interaction with practitioners as we gather the data and again as we share our results.

**REFERENCES**


USING KNOWLEDGE, SKILLS, AND ABILITIES (KSA\textsubscript{S}) AND STAKEHOLDER ANALYSIS TO DEVELOP MANAGEMENT SPECIALIZATIONS

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ABSTRACT
Formalized assessments for degree programs, including their concentrations and specializations, are critical to meet today’s university and business school accreditations. Doing a stakeholder analysis and collecting data from a survey of students and faculty supplemented by published research and online job announcements allowed for the identification of 6 potential specializations (2 variations on leadership, 2 variations on management information systems and technology integrated with operations, and 2 variations on entrepreneurship and small business management) and 16 concepts. Student learning objectives using the concepts and the entrepreneurship specialization are also presented.

INTRODUCTION
An increasingly important role for professional academicians is the identification of desired student learning outcomes in the programs of study offered in our universities. Perhaps even more critical, is the need to assess those programs to determine our degree of success, in enabling students to acquire the targeted set of knowledge, skills, and abilities. Even further, there is also a need to assess those targeted outcomes to determine the programs currently offered are actually teaching or enabling the appropriate set of constructs. As a necessary and expected component for accreditation both regionally as provided for in the SACS Commission on Colleges, Principles of Accreditation: Foundations for Quality Enhancement (SACS, 2010), and by AACSB through the Eligibility Procedures and Accreditation Standards for Business Education (AACSB, 2011) and in light of the bad press received by business colleges since the collapse of the financial industry in 2008, it has never been a more opportune time for programs to develop a clearly focused and formalized assessment. This paper shares the results of such a reassessment of the set of knowledge, skills, and abilities that had been identified for an undergraduate management degree in an AACSB-accredited college of business that is part of a growing university.

We will begin the paper by providing a background of the department doing the reevaluation of the management skill set upon which this report is based. We then will note some of the external views about business in general and the management degree more specifically. Next, we look at the opinions of two key stakeholder groups—employers and students. Following this establishment of some background, we narrow our focus by combining the inputs from these sources and crafting a prioritized list of specializations and management concepts. We finish with a set of knowledge skills and abilities that respond to these conditions and stakeholders for both the general management area and for a specialization. We use the entrepreneurship specialization as an illustrative example.
THE BACKGROUND

Ours is a growing regional university in the mid-Atlantic coastal area. We are located almost literally at the mid-point along the Atlantic coast of the United States. Although our community has its early roots in agriculture, it is now largely focused on tourism accompanied by a growing retirement population. Thus, our main industries, outside of government and education, currently are hospitality, construction and real estate, retail, and medical. The vast majority of businesses in the area are small to medium in size. There are also a large number of family owned businesses.

Our student population is primarily traditionally-aged college students. In Fall 2010, 54% of our total student population came from within the state. Our out-of-state students come from all over the United States and more than 30 countries. Because the university is relatively young (it became an independent 4-year state institution in 1993), the management program began in the college of business as a general management program. The college of business was accredited by AACSB in 1998, and both the college of business and the university have shown tremendous growth since the institution’s independence. The university has grown from 4,453 students in Fall 1993 to 4,556 in Fall 1998 to 8,706 in Fall 2010. The university currently offers 55 baccalaureate degree options and seven masters’ degrees including two in the college of business. The largest undergraduate degree enrollment in the university is in the management major. However, while the university experienced enrollment growth of about 5% per year, the management degree enrollment has remained relatively flat. This lack of parallel growth, coupled with the growing number of other degree options within the university, sparked a need to move our assurance of learning beyond its current version and to examine in total the management degree program from the ground up.

THE EXTERNAL ENVIRONMENT

Institutions of higher education, especially business schools, have come under increased scrutiny regarding the emphasis on certain soft skills and their ultimate impact on the employability of the degree recipient (Barrie, 2006). Professional business owners and professionals in general rate communication, leadership, and systems thinking skills as the most critical of the business or information-oriented skills (Brimhall, Wright, McGregor, & Hernandez, 2009; Tanloet & Tuamsuk, 2011). For many who embrace—whether out of choice or due to a lack of other options—a work life of continual task and role changes, then the key skills are those such as self-assessment, adaptability, life-long learning, work/life balance, opportunity identification and crafting professional networking in addition to discipline—or industry—specific skills (e.g., acting, painting, singing, etc.) (Bridgstock, 2009). Teams, both their creation and management, are still a critical element of many businesses today (Bohmer, 2010; Anderson, 2010; Tanloet & Tuamsuk, 2011). Team management includes managing conflict within teams. However, managing conflict is quite important in all managerial roles as it has been shown that 18% of a manager’s time is spent in conflict management tasks (Hignite, Margavio, & Chin, 2002).

Decision making skills such as analytical thinking and planning (Tanloet & Tuamsuk, 2011) have been found to be important, but so are creativity and innovation (Adler, Hecksher,
Prusak, 2011). Indeed, learning to foster both innovation and new business opportunities while maintaining existing businesses has been shown to be a key capability for the most successful firms (Tushman, Smith, & Binns, 2011; Hitt, Ireland, Sirmon, & Trahms, 2011). Strategically understanding the link between technical skills (those used in production activity) and strategic goals remains critical especially in professional firms (Zinn & Haddad, 2007).

Learning how to work with diverse others in collaborative settings has also been noted in articles about current managerial work situations (Tanloet & Tuamsuk, 2011; Adler, Hecksher, & Prusak, 2011). Adopting as a norm the practice of addressing sustainability issues was recently emphasized at the World Economic Forum (Seidman, 2011). This same body also pointed out the need to connect with both individuals and organizations at a values level on a global scale. The need for entrepreneurial activity around the world has received heightened recognition and study (Brixiova, 2010; Seikkula-Leino, 2011; Papayannakis, Kastelli, Damigos, & Mavrotas, 2008). However, viewing entrepreneurship from a global perspective is not required to see the impact that an entrepreneurial mindset has had on various creative industries (Gatewood & West III, 2005).

Another emerging trend is a shift from general operations in an organizational context to one where specific customized projects are undertaken by cross-functional teams or multidisciplinary personnel (Nieto-Rodriguez, 2011). Indeed, there is a growing need for more qualified project managers (Wheatley, 2009; US News & World Report, 2011) and/or those who can supervise computerized management networks (Farley, 2011). These new project or customer-centered organizations focus on providing customized products and services rather than a standardized product (Farley, 2011). These new approaches to managerial practice clearly point to changes in how work is organized, and consequently also demand serious scrutiny of what and how students who aspire to be managers should be taught. For example, there are those who argue for practical experiences to be gained through the educational process (Economist, 2011).

VIEWS FROM STAKEHOLDERS

When engaged in program reassessment, it is important to gather information from a full set of stakeholders. The faculty involved in this reassessment effort initiated the process of stakeholder evaluation. First, the faculty with responsibilities for teaching management-related coursework were a part of a combined department with two other major areas of focus. As a response to the size of the management major, the department was split, and a new department was created to include “Management and Decision Sciences.” During the first official meeting of a newly created department, the discussion began about the need to reassess and improve the course offerings of management degree program. For several years prior, there had been general discussions about a need to move from a “vanilla” management program of only 15 credits beyond the core business classes to one that would be more attractive to today’s students.

Faculty

Earlier feedback indicated that management was often a “fall back” degree; not one that was originally chosen by students in the business school. The faculty’s perception at that time was
that if the program were revamped in a way that enticed students to intentionally choose management as a major, the result could be the attraction of students with higher initial academic skill levels. Furthermore, a reassessment and renovation of the entire undergraduate program was underway, and it was noted that current management students did not score as well as other students in standardized assessment exam administered at the end of the program of study. This finding reinforced the notion in the minds of the faculty that the students themselves had chosen to move from more mathematically rigorous programs to the “easy” management program (easy because it did not have an intense series of math-based courses). Thus, the initial goal was to increase the appeal of the management degree program.

A second issue that spurred the desire to overhaul the management degree was that its last revision in 2003/2004 had been prompted by a focus on removal of overlapping course components and the addition of international requirements into the management major. At that time, other significant revision was not encouraged, and, in the meantime, the department had added many new faculty to cope with the growth. This group of new faculty had ideas and interests that prompted attention to a more fundamental revision to the curriculum. Appropriate.

A third issue was the number of credits required for a major in management (only 15 as noted previously). This relatively low number of required credits engendered two problems: (1) the lenient credit requirement did not accommodate the possibility of specializations or concentrations in management and raising the requirement above 18 credit hours required a lengthy approval process which included approval by a state agency; and (2) the university had just switched to a resource allocation formula based on the total number of student credit hours taught by a department. By having such a low number of required credits in the management area, the majors were actually generating more student credit hours for other departments rather than for their own major department.

To address these issues, the department decided to develop at least three specializations. Three task forces roughly corresponding to micro, mezzo, and macro levels of management were created. Within a week into the task force work, it was determined that a survey of students was needed to determine just what management specializations, if any, would arouse interest. It was also decided by the macro group to examine what outsiders were expecting for macro-level management specializations. The faculty also responded to the survey.

Students

Students provided input through the survey which was administered within the context of three courses: (1) a freshman-level required course introducing the students to the university; (2) a business core junior-level required introduction to management course; and (3) the final capstone business core course. Initially links were emailed to the freshmen students to respond to the survey online. This resulted in 49 responses from an emailing to about 250 students in the freshmen class. The low response rate prompted a shift to a paper questionnaire for the junior and senior-level courses. The junior and senior-level courses had about 250 students enrolled. Because some sophomores were in the freshmen class and others were in the junior level class, there was representation across both lower division and upper division levels. The final number
of responses was 227 (out of 500). Because of the low response rate from the freshmen, level of academic attainment was slightly skewed towards upper division students (lower division 36.6% versus upper division of 63.4%). About 60% were men and 40% were women which reflected the general enrollment split between men and women in the business college.

The students were initially given the following question stem: “To what extent are you interested in the following major concentration options?” The options named were: international management, human resource management, leadership, sustainability and corporate social responsibility, leadership and organizational development, entrepreneurship, small and family business, operations and technology management, management information systems, business analytics, global supply chain, operations, and general management. The students were asked to indicate their level of interest ranging from 0 (not at all) through 6 (to a great extent). The results of the survey, arranged in order of the level of interest expressed by the students, are presented in Table 1.

<table>
<thead>
<tr>
<th>Specialization</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>Student Mean</th>
<th>Faculty Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>28.57%</td>
<td>17.65%</td>
<td>4.86</td>
<td>3.86</td>
</tr>
<tr>
<td>Leadership and Organizational Development</td>
<td>3.94%</td>
<td>10.78%</td>
<td>4.53</td>
<td>4.86</td>
</tr>
<tr>
<td>Leadership</td>
<td>16.26%</td>
<td>12.75%</td>
<td>4.48</td>
<td>4.31</td>
</tr>
<tr>
<td>General Management</td>
<td>6.40%</td>
<td>9.31%</td>
<td>4.40</td>
<td>3.21</td>
</tr>
<tr>
<td>Operations and Technology Management</td>
<td>4.43%</td>
<td>8.82%</td>
<td>4.21</td>
<td>3.46</td>
</tr>
<tr>
<td>Small and Family Business</td>
<td>6.90%</td>
<td>17.16%</td>
<td>4.15</td>
<td>4.50</td>
</tr>
<tr>
<td>Management Information Systems</td>
<td>4.43%</td>
<td>4.90%</td>
<td>4.12</td>
<td>4.00</td>
</tr>
<tr>
<td>Operations</td>
<td>0%</td>
<td>2.45%</td>
<td>3.48</td>
<td>3.36</td>
</tr>
<tr>
<td>Sustainability and Corporate Social</td>
<td>3.45%</td>
<td>1.96%</td>
<td>4.09</td>
<td>3.85</td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Analytics</td>
<td>4.43%</td>
<td>3.43</td>
<td>3.97</td>
<td>3.86</td>
</tr>
<tr>
<td>International Management</td>
<td>15.27%</td>
<td>4.9%</td>
<td>3.85</td>
<td>3.69</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>4.43%</td>
<td>3.92%</td>
<td>3.67</td>
<td>5.00</td>
</tr>
<tr>
<td>Global Supply Chain</td>
<td>.99%</td>
<td>1.47%</td>
<td>3.27</td>
<td>3.07</td>
</tr>
</tbody>
</table>

While not all possible management concentrations were included in the survey, a good representation of micro (leading people), mezzo (leading projects or operations), and macro (leading organizations) management choices were offered for consideration. The student’s interests and their first and second choices did, in some cases, match, and in other cases, they did not. The best matches were observed in the expressed interest in entrepreneurship and leadership. Entrepreneurship was top vote getter in general interest, in first choice and in second choice. Leadership ranked third in general interest, second in first choice and third in second choice. Two noticeably mismatched choices were the international management choice and the small and family business choice. In the case of international management, it was near the bottom in overall level of interest but was incongruously third for a first choice. The small and family businesses choice, placed slightly above midrange in overall interest, but was fourth as a first...
choice and second as a second choice. These apparent mismatches could suggest that some areas would be popular as elective choices even if the student chooses a different specialization. By ranking the orders for general interest and first choice and averaging them we obtained a ranked listing of potential specializations (See Table 2). The listing process continued until at least 2 specializations for each level (micro, mezzo, macro) were identified.

Table 2: Top Specializations by Student Interest

<table>
<thead>
<tr>
<th>Rank</th>
<th>Average Ranking</th>
<th>Specialization</th>
<th>Management Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Entrepreneurship</td>
<td>Macro</td>
</tr>
<tr>
<td>2</td>
<td>2.5</td>
<td>Leadership</td>
<td>Micro</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>General Management</td>
<td>All</td>
</tr>
<tr>
<td>4</td>
<td>4.5</td>
<td>Leadership and Organizational Development</td>
<td>Micro</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Small and Family Business</td>
<td>Macro</td>
</tr>
<tr>
<td>6</td>
<td>5.5</td>
<td>Operations and Technology Management</td>
<td>Mezzo</td>
</tr>
<tr>
<td>7</td>
<td>6.5</td>
<td>Management Information Systems</td>
<td>Mezzo</td>
</tr>
</tbody>
</table>

The faculty responses from the survey (see Table 1) are a bit misleading. There are three distinct areas of interest within the management department: organizational behavior/human resource management (OB), strategy/entrepreneurship/small business management (BPS), and decision sciences (OPS). Thus, each group has its own distinct areas of interest with the most overlap occurring between the OB and the BPS faculty. Perhaps a more accurate way to view these varying areas of emphasis is to examine the degree of value placed by each group on various management constructs (see Table 3). Also indicated in Table 3 are which of these have been identified as necessary managerial skills in current research articles. The remaining two columns show the value placed on the constructs by faculty and students.

Table 3: Value of Management Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Research</th>
<th>Job Ads</th>
<th>Faculty</th>
<th>Students</th>
<th>Ave. Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to recognize business opportunities</td>
<td>√</td>
<td>√√√</td>
<td>5.29</td>
<td>5.20</td>
<td>4.97</td>
<td>4</td>
</tr>
<tr>
<td>Ability to solve business problems/decision making skills</td>
<td>√</td>
<td>√√√√√</td>
<td>5.71</td>
<td>5.19</td>
<td>5.3</td>
<td>2</td>
</tr>
<tr>
<td>Ability to integrate global issues into business decisions</td>
<td>√</td>
<td>√√√</td>
<td>4.93</td>
<td>4.40</td>
<td>4.11</td>
<td>8</td>
</tr>
<tr>
<td>Ability to use technology to solve business problems/computer literate</td>
<td>√</td>
<td>√√√</td>
<td>5.21</td>
<td>4.95</td>
<td>4.05</td>
<td>10</td>
</tr>
<tr>
<td>Ability to work well with people of diverse backgrounds</td>
<td>√</td>
<td>√√√√√</td>
<td>5.21</td>
<td>5.07</td>
<td>4.76</td>
<td>5</td>
</tr>
<tr>
<td>Skill in directing the work of others</td>
<td>√</td>
<td>√√√√√</td>
<td>5.</td>
<td>4.96</td>
<td>4.99</td>
<td>3</td>
</tr>
<tr>
<td>Skill in resolving conflicts</td>
<td>√</td>
<td>√√√</td>
<td>5.</td>
<td>5.16</td>
<td>4.05</td>
<td>10</td>
</tr>
<tr>
<td>Skill in starting and managing your own</td>
<td>√</td>
<td></td>
<td>3.77</td>
<td>4.83</td>
<td>4.3</td>
<td>7</td>
</tr>
</tbody>
</table>
### Table 3: Value of Management Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Research</th>
<th>Job Ads</th>
<th>Faculty</th>
<th>Students</th>
<th>Ave. Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to understand how the operations of a company function (service companies)</td>
<td>√</td>
<td>√</td>
<td>5.14</td>
<td>5.07</td>
<td>4.07</td>
<td>9</td>
</tr>
<tr>
<td>Ability to lead others toward accomplishment of organizational goals</td>
<td>√</td>
<td>√√√√√√</td>
<td>5.</td>
<td>5.03</td>
<td>5.34</td>
<td>1</td>
</tr>
<tr>
<td>Knowledge of sustainable business practices</td>
<td>√</td>
<td>√</td>
<td>4.21</td>
<td>4.79</td>
<td>3.33</td>
<td>13</td>
</tr>
<tr>
<td>Ability to diagnose organizational problems.</td>
<td>√</td>
<td>√</td>
<td>4.92</td>
<td>4.83</td>
<td>3.92</td>
<td>12</td>
</tr>
<tr>
<td>Ability to lead through innovation/innovative/creative</td>
<td>√</td>
<td>√√√∇</td>
<td>4.78</td>
<td>4.94</td>
<td>4.57</td>
<td>6</td>
</tr>
<tr>
<td>Communication</td>
<td>√</td>
<td>√√√∇</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systems thinking</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Self-assessment/ Self-motivation/ Self-discipline</td>
<td>√</td>
<td>√√√√√√</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability</td>
<td>√</td>
<td>√√√√√</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life-long learning</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Work-life balance</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Crafting professional relationships/ social networking</td>
<td>√</td>
<td>√√√√</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working in/managing/leading teams</td>
<td>√</td>
<td>√√√√√√</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrepreneurship (starting new businesses from within an existing organization)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Strategic thinking</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Managing Meetings</td>
<td>√</td>
<td></td>
<td>1</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing projects</td>
<td>√</td>
<td>√√√√</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hires/Trains and develops employees</td>
<td>√</td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional orientation</td>
<td>√</td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International experiences (travel abroad, study abroad, work abroad)</td>
<td>√</td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaks more than one language</td>
<td>√</td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Experience/ Internship</td>
<td>√</td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work ethic/ action oriented/ self-starter</td>
<td>√√√√</td>
<td></td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Employers**

The job announcements from retail, service, and other regional employers were examined. Summaries of the sets of duties, responsibilities or qualifications by industry are also shown in
Table 3. Management interns, trainees and assistant manager positions were studied. From the retailing sector, we examined websites including Toys R Us (Toys R Us), J. C. Penney’s (J. C. Penney’s). The service industry websites examined included TUI Travel (TUI Travel), Fulton (Fulton), Unilever (Unilever), AT&T (A T & T), Hertz (Hertz), AMF Bowling (AMF Bowling), and SFI Consulting (SFI Consulting). Given the region’s agricultural roots that created needs for distribution centers, we also viewed job announcement websites for British American Tobacco (British American Tobacco) and Pepsi (Pepsi). The items mentioned in all of these job announcements were categorized according to the constructs already listed in Table 3 or in some cases, a new construct was added. Check marks were inserted to indicate which job announcements included which constructs. Only public knowledge data of this type were used for the assessments of the capabilities required by potential employers of our undergraduate management degree holders. For the calculation of average scores, each mention of a construct was allocated 1 point and those points were added to the faculty and student value scores and an average was taken.

Based on this analysis of valued capabilities, several points emerged. First, entry level position requirements identified abilities and skills that had not been included in the survey. Thus, as a final screening of priorities, and recognizing a value of 3 as the “neutral” point in the survey, a decision rule was adopted that survey items with scores of less than 4 would not be included in the final list. Of the new concepts (those not included in the original survey but appearing in the job announcements), those with at least 5 checkmarks (indicating 50% of the potential employers mentioned them) were included in the revised list of concepts. The prioritized lists of managerial concepts from the survey are:

1) Ability to lead others toward accomplishment of organizational goals;
2) Ability to solve business problems/ decision-making skills;
3) Skill in directing the work of others;
4) Ability to recognize business opportunities;
5) Ability to work well with people of diverse backgrounds;
6) Ability to lead through innovation or to be innovative/creative;
7) Skill in starting and managing one’s own business;
8) Ability to integrate global issues into business decisions;
9) Ability to understand how the operations of a company function (service companies);
10) Ability to use technology to solve business problems/ computer literacy and Skill in resolving conflicts (tied).

The prioritized list from the employers that went beyond those found in the survey are:

1) Communication (including written, oral and interpersonal)
2) Working in/managing/leading teams
3) Crafting professional relationships/ social networking and Self-assessment/ Self-motivation/ Self-discipline and Managing projects (tied at 5 check marks each)

From the above analyses, we concluded that seven specializations should be considered by the management department and 16 management knowledge areas, skills and abilities should be recognized as being valuable for all management students to acquire. After consideration of this
wide range of possibilities, a set of recommendations were crafted. These are presented in the next section.

RESULTS

Recommendations indicated the specialization options that were deemed to be appropriate for an institution faced with the environmental context described in our background work. In addition, a potential set of student learning objectives for the management degree in general were proposed, and then we proceeded to demonstrate how those objectives could be customized for each specialization area that was recommended.

Specializations

The topic areas of the specializations recommended were 1) Leadership (micro), 2) entrepreneurship (macro) 3) Leadership of Organizational Development and Change (micro), 4) Managing Operations and Technology (mezzo), 5) Applied Management Information Systems (mezzo), and 6) Family and Small Businesses (macro). The seventh area, General Management, would be a track that would allow for the inclusion of items from the other tracks in use.

While it is true that the faculty for each of the areas of management have the skills and interests to pursue these recommended specializations, they also have preferences. These preferences are reflected in the faculty’s responses to the specialization topic areas. Each specialization topic was prioritized based on the level of faculty interest noted in Table 1. This information was then arranged by management level, specialization topic area and prioritized by faculty interest (see Table 4).

<table>
<thead>
<tr>
<th>Management Level</th>
<th>Specialization</th>
<th>Faculty Interest</th>
<th>Faculty Rankings</th>
<th>Student Rankings</th>
<th>Final Rank score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>Leadership</td>
<td>4.31</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Leadership of Organizational Development &amp; Change</td>
<td>4.86</td>
<td>1</td>
<td>4</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>Mezzo</td>
<td>Applied Management Information Systems</td>
<td>4.00</td>
<td>1</td>
<td>6</td>
<td>3.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Managing Operations and Technology</td>
<td>3.46</td>
<td>2</td>
<td>7</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>Macro</td>
<td>Entrepreneurship</td>
<td>4.86</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4: Prioritized Top Specializations
Based on this analysis and the recognition of limited resources, it was acknowledged that only 3 specializations could be adopted initially. If recommendations were ultimately based solely on prioritized results which meant that the areas of specialization would be: (1) Entrepreneurship, (2) Leadership, and (3) Leadership of Organizational Development and Change. If, however, it was deemed more appropriate that the recommended offerings include one from each management level, then the recommended specializations would be: (1) Leadership (micro), (2) Applied Management Information Systems (mezzo) and (3) Entrepreneurship (macro).

Recognizing the importance of generating interest and “selling” these new specializations, catchy titles are suggested. As a starting point, we came up with the following suggested titles for each of the prioritized specializations:

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Suggested Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Leadership and Human Capital Management</td>
</tr>
<tr>
<td></td>
<td>Leadership in a Global Environment</td>
</tr>
<tr>
<td></td>
<td>Leadership Development</td>
</tr>
<tr>
<td>Applied Management Information Systems</td>
<td>Modeling Organizations</td>
</tr>
<tr>
<td></td>
<td>Social Networking and Organizational Virtual Support</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Innovation, Creativity and Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>Creative Enterprises and Entrepreneurship</td>
</tr>
<tr>
<td>Leadership of Organizational Development &amp; Change</td>
<td>Uncertain Times &amp; Leadership</td>
</tr>
<tr>
<td></td>
<td>Leading Personal Change and Growth</td>
</tr>
<tr>
<td></td>
<td>Professional Leadership</td>
</tr>
<tr>
<td>Managing Operations and Technology</td>
<td>Operations in the Digital World</td>
</tr>
<tr>
<td>Family and Small Business</td>
<td>High Performance Use of Organizational Technology</td>
</tr>
<tr>
<td></td>
<td>Invigorating the Family or Small Business</td>
</tr>
<tr>
<td></td>
<td>Growing the Family or Small Business</td>
</tr>
</tbody>
</table>
Managerial Knowledge, Skills, and Abilities (aka Student Learning Objectives)

While it would have been relatively easy to simply combine these two sets of managerial knowledge bases, skills and abilities, an appealing alternative was to synthesize them. In an earlier unrelated work (authors’), it was found that it was possible to integrate skill areas common to both leadership development and the development of teams to create the following 10 basic managerial skills. The student learning objectives presented in the next section may be appropriate here as well. The Student...

1) *Knows how to plan.* Student can effectively craft a plan for accomplishing a work task or project. Student can sequence tasks and understand how to avoid and/or anticipate bottlenecks in accomplishing work. Student understands and can explain how the work plan is related to the organization’s goals and structure.

2) *Knows how to assess progress.* Student can determine milestones, identify information needed to assess progress, gather such information, and evaluate the information to determine if the progress is sufficient and appropriate. The student knows the full set of stakeholders that should be included in both the assessment process and in the original goal setting process.

3) *Asks for and provides feedback.* Student can accurately assess level of quality and provide constructive feedback that is received positively and productively. Student can also solicit feedback proactively, receive it objectively and use it effectively to improve work.

4) *Knows time management techniques.* Student can accurately estimate the amount of time required to complete a project. Such estimates are based on accurate self-assessments of the amount of time needed to complete his/her own project responsibilities while combining them with others’ self-assessments. Student can manage commitments across multiple projects and correctly prioritize efforts to meet organizational and personal goals.

5) *Knows how to build consensus.* The student understands how to gain agreement, generate motivation, and use both formal and informal influence strategies to accomplish group goals.

6) *Presents persuasive arguments.* The student knows how to construct a persuasive argument based on logic and emotional intelligence cues and can lead people to the appreciation of a particular perspective.

7) *Coordinates and provides resources.* The student can identify resource needs, locate and secure those needed resource through the use of personal or professional networks. Student also knows how to repurpose current resources to fit identified needs. Student can determine how to obtain resources and distribute them as needed.

8) *Conducts meetings.* The student understands effective meeting processes, especially how to focus attention and resolve process issues. Student can use meeting process tools accurately and can conduct effective and efficient meetings.

9) *Is skilled in written communications.* The student can communicate effectively using non-oral communication techniques that are typically technology mediated. The student can craft professional quality reports, memos, and records that can be digitally
transmitted. The student can receive reports digitally and translate them into printed format. Students can translate printed documents into professional digital versions.

10) **Solves problems and/or works collaboratively.** The student can effectively work in teams to solve unstructured and complex problems. The student can use team processes and roles effectively to enable both the individual completion of assigned duties and tasks as well as the collective completion of the problem solution or task thus enabling the forward movement of an organizational or group toward a goal.

Program objectives that are written unclearly or too vaguely are difficult to assess with any assured consistency because each user is likely to apply his/her own biases and interpretations. While such variation might lead to “interesting” results, it would be ineffective for demonstrating program assessment and a closed feedback loop with improvement steps. Therefore, it is recommended that some of the student learning outcomes (SLOs) be common measures across all management classes and that other SLOs be tailored specifically for the specialization to which they apply. Such an approach would result in the following refined recommendation.

**Specialization Based Student Learning Objectives**

Specific program objectives are typically the last layer in a series of developmental student learning objectives. Thus the following three layers are recommended: Foundational, Advanced and Specialized. Each of these three levels is discussed in their implied order in the following paragraphs.

**Foundational** The foundational student learning objectives would be attained early in the student’s management program. Since having a firm understanding of the **basic vocabulary** used in management courses is a necessary first step, this student learning objective should be achieved while the student is taking those courses designated as the business core.

**SLO #1:** The student will demonstrate a clear understanding of the basic managerial vocabulary.

Another set of foundational skills are **time management and stress management.** For a student to be successful in his/her college career and then in a managerial role, he/she needs to know how to manage time effectively. Students also need to learn effective methods for reducing or managing stress. This, too, is a learning experience that should occur early in the student’s academic career. Specifically, an introduction to time and stress management skills should be incorporated into the college of business’s version of the freshman orientation course.

**SLO #2:** The student will demonstrate a clear understanding of how to apply time management techniques using basic computer mediated systems.

**SLO #3:** The student will demonstrate how to use exercise, recreation, or other stress reduction techniques and to regularly incorporate these practices as a part of their life style.

The final foundational skill is in the communication area. Management students are expected to have very well developed communication skills both written and oral. These skills can be developed to a high level only if students enter the management program already possessing a
minimum level. The expectation is that students attained these basic communication skill levels in the university's English department through the course(s) required by their disciplinary specialization.

SLO #4: The student will demonstrate a clear understanding of and be able to produce basic digital text-based communication formats such as business email, memos, reports and worksheets.

SLO #5: The student will be able to deliver a 3-minute presentation on a business topic without the use of notes.

SLO #6: The student will create effective basic presentation slides for use in longer formal business talks.

**Advanced** There are several competencies (skills and abilities) that all management students can learn in a common setting. It is recommended that the student learning outcomes associated with these advanced competencies be acquired as a part of junior level management courses. These advanced competencies support the general program student learning objectives described previously. The learning objectives for these competencies include the following:

SLO #7: The student will demonstrate a clear understanding of how to formulate and set clear and attainable goals for his/her personal life and for use in an organizational setting.

SLO #8: The student will demonstrate the ability to receive feedback in a receptive, non-defensive fashion.

SLO #9: The student will demonstrate the ability to deliver accurate and meaningful feedback in an ethical and sensitive fashion.

SLO #10: The student will demonstrate the ability to adjust processes and deliverables in response to feedback.

SLO #11: The student will demonstrate an understanding of negotiation, motivation and influence tactics to support the development of consensus in a work group setting.

SLO #12: The student will demonstrate the use of persuasive logic in the construction of arguments or conclusions. Such persuasive logic includes, but is not limited to, analytical reasoning, authority reasoning, and formal logical reasoning.

SLO #13: The student understands and can demonstrate verbal and non-verbal cues indicating another individual's receptivity of a statement reflecting the American culture and one other culture.

SLO #14: The student understands the process roles of highly effective work teams and can perform each team role at a minimal standard of competence.

**Specialized** Each of the specializations would then craft learning objectives for the remaining general ones not yet covered that more precisely reflect the specialization's emphasis on the general objective. The entrepreneurial specialization is used below as an example. The entrepreneurship specialization student…

EI-SLO #1: Knows how to plan. Student can effectively plan a business start-up either as a stand-alone entity or within the framework of another business. Student can sequence tasks and understand how to avoid and/or anticipate and adjust to
obstacles encountered in the process of developing the business start up. Student understands and can explain how the business plan demonstrates the organization’s goals and structure.

EI-SLO #2: Knows how to assess progress. In an experiential learning context involving a business start-up or in a consulting role for a business start-up or major organizational innovation project the student can develop milestones, determine the information needed for assessing progress, collect the required information, accurately assess the information to determine if the measured progress is adequate and appropriate and report that progress level to his/her supervising instructor. The student knows the full set of stakeholders which must be included in both the assessment process and in the original goal setting process.

EI-SLO #3: Asks for feedback and provides feedback. Student can assess quality of other business plans and provide constructive feedback that can be received positively and used productively by the peer business plan creator or client. Student can also solicit feedback proactively, receive it objectively and use it effectively to improve work as demonstrated by practicing opportunity pitches to his/her entrepreneurial network members, classmates, or in competitions.

EI-SLO #4: Knows time management techniques. Student can accurately estimate the amount of time required for developing a business plan or innovation plan project based on accurate self-assessments of time needed to complete personal aspects of the project in addition to incorporating the self-assessments of others. Student can manage commitments across multiple projects and correctly prioritize efforts to meet organizational and personal goals as demonstrated by the completion of a senior project in entrepreneurship or intrapreneurship.

EI-SLO #5: Knows how to build consensus. The student understands how to gain agreement, generate motivation, and use both formal and informal influence strategies to accomplish a major entrepreneurial or intrapreneurial innovation effort.

EI-SLO #6: Presents persuasive arguments. The student knows how to construct a persuasive argument based on logic and emotional intelligence cues and can lead people to an appreciation of a particular perspective. Evidence of the attainment of this outcome would be demonstrated by the successful creation of an entrepreneurial practicum team, the winning or placing in a regional or national business plan competition, or other similar activity.

EI-SLO #7: Coordinates and provides resources. The student can identify resources needed for a practicum. Student can locate those resources using personal or professional networks. Student can repurpose resources on hand to fit identified needs. Student can determine how to obtain resources and how to distribute them as needed to craft and present a business plan in competition successfully, design an innovative or entrepreneurial project for a client company, or implement a business plan in a practicum setting.

EI-SLO #8: Conducts meetings. The student understands effective meeting processes and especially how to focus attention and resolve process issues. Student can use meeting process tools accurately and conduct effective and
efficient meetings for the completion of the senior level practicum, competition, or client work.

EI-SLO #9: *Is skilled in written communications.* The student can communicate effectively using non-oral communication techniques that are typically technology mediated as demonstrated in his/her senior practicum project. The student can craft memos detailing information about progress in accomplishing the practicum. The student can create memos and letters that negotiate for resources effectively. The student is able to create records for the design and accomplishment of the work tasks required for the practicum, and can develop formal reports of the results of the practicum in practical learning of entrepreneurship or intrepreneurship processes, bottlenecks and accomplishments.

EI-SLO #10: *Solves problems or works collaboratively.* The student can work effectively in teams to solve unstructured and complex problems involved in recognizing a business opportunity and designing a business plan or an innovation plan to take advantage of that opportunity. The student can use team processes and roles effectively to enable both the individual completion of assigned duties and tasks and the collective completion of the problem solving or task enabling the furthering of the senior practicum, entrepreneurial/intrepreneurial internship, client project or competition.

By engaging in the full strategic assessment of the management degree and the program’s current and future needs, the newly formed management department has been given a basis for making strategic changes to the management degree program.

CONCLUSION

Program assessment has been often viewed as a “necessary evil” that impedes the progress of “real” academic work. Nonetheless, all organizations benefit from periodic strategic evaluations, and the management degree program is no exception to that general rule. This paper reports on the efforts of several strategic management faculty members to lend their area expertise to this academic process.

Our analysis of the external environment confirmed the faculty’s understanding of some important managerial knowledge bases, skills and abilities and added some new ones. The survey completed by students and faculty further helped to refine the set of knowledge and capabilities that are regarded as valuable to this particular management department. By synthesizing the results from drawn from external stakeholder and internal stakeholders, we were able to further customize them arrive at the recommended areas of specialization. We crafted specific program objectives that can be used effectively in further strategic assessments of the program. Based on these departmental objectives we also provided an illustration of more precise student learning outcomes for one of the specializations.

While the context of the strategic assessment and recommendations presented here is admittedly narrow -- it is just the report of one department at one institution --, we hope that this
contextualization will allow other institutions to learn from our work and perhaps reduce the time needed to provide their own departmental specialty programs and student learning outcomes.

REFERENCES


A MULTI-LEVEL ANALYSIS OF CORPORATE SOCIAL RESPONSIBILITY: GENDER DIFFERENCES AND CORPORATE STRATEGIES

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ABSTRACT

The balance between profit maximization and corporate social responsibility (CSR) has become a strategic issue of considerable importance. Our study examines this relationship through a multi-level analysis of consumer attitudes toward CSR and whether their behaviors are in accordance with those attitudes. While prior literature suggests a gap between consumers’ environmental attitudes and behaviors (purchase decisions) we find evidence that for certain segments of the consumer population (females) this “gap” is greatly reduced. We use social identity theory to explain this phenomenon of gender differences as they relate to CSR.

Key Words: Corporate Social Responsibility, Competitive Advantage, Gender, Consumer Attitudes and Behavior

GENDER DIFFERENCES AND CORPORATE STRATEGIES

Organizations are under increasing pressure from a wide array of stakeholders to demonstrate that they are being responsible stewards toward the society in which they operate (Alsmadi, 2007). This pressure is coming from governments, regulatory agencies, consumers, and supply chain partners who desire to see companies improve their socially responsible performance (Lawrence and Weber, 2011). As a result of this market pressure, many organizations are increasingly seeing opportunities to strategically differentiate their products and services by embracing sustainability as a core value and key success factor. However, before an organization pursues a differentiation strategy of CSR, it needs to ensure that consumers, employees, investors and other stakeholders will embrace this unique mix of value.

The purpose of this paper is to further this discussion by investigating this topic from a multi-level of analysis whereby we combine the micro-level study of individual attitudes and their impact on consumer behavior with the broader macro-level strategic implications of pursuing a strategy based on CSR. By understanding individual attitudes toward CSR and the level of support for these activities, a firm will be able to better justify an investment in this type of strategy. To examine this phenomenon we utilize signaling theory, social identity theory, and
gender research to provide a theoretical framework and then conduct an empirical investigation of our research questions.

THEORETICAL FOUNDATION AND HYPOTHESES DEVELOPMENT

Corporate Social Responsibility

The idea of CSR has been conceptualized and defined by many researchers. Carroll (1999) and Dahlsrud (2006) both contributed to further refinement of CSR through their studies, which consolidated the numerous definitions and identified key constructs for CSR. Following guidelines offered by Jamali (2008) and Tucker (2008), we are not attempting to re-conceptualize or re-define CSR, but rather to advance development of CSR research through the use of signaling and social identity theories. Our goal then, through an adoption of a broadly defined concept of CSR, is to examine whether a firm can appeal to individual consumer values and attitudes through the firm’s CSR strategies and increase the potential for those consumers to buy the firm’s products. To examine these relationships between consumer attitudes and behaviors toward CSR we identify five primary dimensions that are built within the foundation of the Carroll (1991) CSR pyramid and are consistent with both Sankar and Bhattachary (2001), and Turker (2008). The following is a list of the dimension and their definitions that have been adapted from (Sankar and Bhattachary, 2001); 1) corporate governance – legal compliance and ethical values of the firm, 2) employee welfare – diversity of employees based on age, gender, race, disability, and working conditions, 3) environment – all aspects of production distribution, and packaging, 4) community – support to the local and global community and address societal problems, 5) economic – perform in a manner consistent with maximizing earnings, profitability, competitive positions, and efficiencies. By utilizing these five dimensions in our development of the CSR concept we are allowing for a broad spectrum of CSR strategies that a firm could potentially implement that may have varying signaling effects and appeal to different consumer segments.

Signaling, Social Identity, Consumer Behavior, and CSR

Consumers are a primary stakeholder of an organization (Longo, Mura, Bonoli, 2005), and attracting customers is a vital component of a firm’s strategy as they provide the major source of revenues. How then can firms differentiate themselves from other firms when attracting consumers? One possible way is to appeal to the identity of the individual. Drawing on propositions from signaling theory (Ashforth & Courter, 1995) and social identity theory (Rynes, 1991), we argue that organizations can use the signaling of their CSR programs as a way to relate to consumers’ social identities.

Social identity theory suggests that individuals will classify themselves into social categories on the basis of various factors, such as the organization they work for or the products they purchase (Ashforth & Mael, 1989). Then membership in these social categories will influence the individual’s self-concept (Dutton, Dukerich, & Harquial, 1994). Further, it has been noted that engaging in CSR programs and activities will affect an organizations image and reputation and therefore may affect an individual’s self-concept (Dutton, Dukerich, & Harquial, 1994). In the
case of CSR, if a firm has a reputation for being environmentally friendly, then a consumer buying that company’s products may also see themselves as being environmentally friendly. Therefore, we expect that a firm engaging in CSR will signal to consumers that it is concerned with social issues and will positively affect the firm’s reputation and that of the consumers who purchase their products (Turban and Greening, 1997). Following this logic, we posit that CSR will influence consumers’ behaviors in terms of attracting consumers to buy the firm’s products.

**Consumer Behaviors and CSR**

The theory of reasoned action (Ajzen and Fishbein, 1980) and Ajzen’s theory of planned behavior (1991) have been widely used to examine and explain consumers’ attitudes toward environmental activities and other corporate socially responsible actions (Fraj and Martines, 2007; Pickett-Baker & Ozaki, 2008; Rokka & Uusitalo, 2008). The theory of reasoned action “posits that behavioral intentions, which are the immediate antecedents to behavior, are a function of salient information or beliefs about the likelihood that performing a particular behavior will lead to a specific outcome” (Madden, Ellen, and Ajzen, 1992: p. 3). A central pillar of this theory is that individuals are able to exert a certain amount of volitional control and thus can make reasoned choices among possible options and their outcomes (Han, Hsu, & Sheu, 2010). The theory of planned behavior (Ajzen, 1991) builds on the theory of reasoned action by taking into consideration the ability of the actor to gain resources needed to complete the behavior and the opportunities available to the actor to complete the action (Han, Hsu, & Sheu, 2010; Madden, Ellen, and Ajzen, 1992). However, a review of the literature suggests that consumers’ attitudes toward environmental issues do not always lead to behaviors that support those beliefs (Laroche, Bergeron and Barbaro-Forleo, 2001; Pickett-Baker and Ozaki, 2008; and Rokka and Uusitalo, 2008). Impacting this gap between attitudes and behaviors is the incongruent nature of a consumer’s ideal self and their real self.

The concept of self plays a major role in the consumer behavior literature and is key to understanding why consumers’ stated preferences for socially responsible companies and products do not always match their purchases. Image-congruence theory (Onkvisit and Shaw, 1987) states that consumers purchase products and shop at stores that are aligned with the consumer’s self-concept. Mehta and Belk (1991) describe self-concept as though a person steps back and objectively evaluates themselves as an object. “By acting in a manner consistent with their self-concept, consumers can maintain their self-esteem and gain predictability in interactions with others,” (Mowen and Minor, 2006 p. 111).

**Hypothesis 1 (H1):** There will be a positive relationship between a consumers’ attitude toward CSR and their willingness to behave consistent with those attitudes.

**Gender and CSR**

Prior research that has examined the relationship between CSR and gender has focused on aspects of leadership (Marshall, 2007), ethical issues (Lamsa et al., 2008), and employee commitment (Brammer et al., 2007). Findings suggest that women value corporate social and ethical issues more than men (Peterson, 2004; Lamsa et al., 2007; MacPahil & Bowles, 2009;
Authors posit that men are less concerned with social and ethical issues and more concerned with economic performance of the firm (Lamsa et al., 2008).

The influence of gender on a firm’s CSR program has been connected to employment decisions and firm commitment by employees. Brammer et al. (2007) examined the relationship between employee’s perceptions of their firm’s CSR initiatives and employee commitment to the firm. Employees were more committed to firms which they perceived were strong on corporate social responsibility; however the increase in commitment was larger for females than for their male counterparts. Commitment is an important aspect of developing and maintaining social identity. Designation to a particular group encourages individuals to adhere to the norms and expectations of the group. When an individual commits they are more likely to reinforce what they consider to be in the best interest of the collective. In this case the collective is society. When females become committed to CSR, which the firm promotes, it becomes an identifying characteristic in which the group embeds and identifies with.

Accordingly, the effects of gender differences in corporate values and behaviors suggest that gender may be a predictor of socially responsible actions. The support that females err on the side of group interests versus individualism suggests that when faced with a decision that knowingly will affect others, they are more prone to choose the most beneficial path for all parties involved. Therefore,

Hypothesis 2A (H2a): There will be a positive relationship between females and positive attitudes toward CSR.

Hypothesis 2B (H2b): There will be a positive relationship between females’ positive attitude toward CSR and their willingness to behave consistent with those positive CSR attitudes.

METHODOLOGY

Sample

This study was conducted using a convenience sample of undergraduate students. Students were appropriate for this study as they are consumers that go through a decision making process when making buying decisions. A web-based survey tool was utilized to collect the data. A total of 175 responses were collected and 119 were useable for the analysis. The 56 unusable responses were discarded for not completing the survey. The makeup of the final sample was as follows; 49% male and 51% female with an average age between 22 and 25. The survey was distributed in a college of business of a large, southwest, public university, resulting in 83% of respondents being business majors.

Measures

While researchers have developed many different survey instruments in an effort to measure different aspects of CSR, we were unable to identify one specific scale that seemed to capture all the dimensions of CSR from a consumer behavior perspective. Therefore, specific items were
extracted and contextualized from exiting instruments from several existing survey instruments. For development purposes, Exploratory Factor Analysis was used with Principal Component Analysis and a Varimax rotation to identify the specific dimensions of attitudes toward CSR and behaviors that would be seen as acting in line with those positive attitudes toward CSR. Factors were identified by eigen values greater than 1.0, all Cronbach alpha reliability scores were higher than the theoretically acceptable minimum of .70 (Nunnally, 1978). Additionally, individual items were dropped when they failed to achieve at least a .40 loading on any factor (Raubenheimer, 2004). To further create each individual factor, the mean of the individual items loading on a particular factor were calculated (Hair, Black, Babin, Anderson, Tatham, 2006). All variables in the survey instrument were measured by participant responses to questions on a seven-point Likert-type scale ranging from “strongly disagree” to “strongly agree.” Once the specific dimensions were identified, generalized variables were created for attitudes and behaviors.

Analysis

Hierarchical multivariate linear regression was used to examine the hypothesized model. We conducted three separate regression models as seen in Table 4. The first model included the dependent variable (consumer behavior) and the demographic and socio-economic/political control variables to determine our control model. The second model included the independent variable of consumer attitudes. The third model then included the gender variable female, as this what our primary variable of interest. By running these three separate models we were able to determine the specific variable that contributed to the explained variance of consumer behavior.

RESULTS

Table 3 provides the descriptive statistic and correlations of all variables. Some interesting zero-ordered correlations among the variables deserve to be highlighted. Specifically interesting was the relationships between gender and the all other variables. This is important to point out because these correlations relate directly to our hypotheses regarding gender. The gender variable correlated with and was statistically significant at p<.01 levels with the attitude variable. Specifically, females were positively correlated with the attitude variables. Females were also negatively correlated with the Legal action variable. As such, this correlation provides initial support for our hypothesis (H2) regarding females having a positive attitude toward CSR based on our a priori understanding of gender and CSR, which takes into consideration all parties affected by a firm’s actions (Lamsa et al., 2008).
Bivariate scatterplots between the continuous predictors and each independent variable were examined to confirm linear relationships between the variables. Finally a scatterplot of standardized residuals and standardized predicted values was examined to evaluate the homoscedasticity assumption for each of the four models run. The standardized errors for each model were relatively evenly distributed across the range of predicted values, as so the assumption was tenable.

The control model (Model 1) indicated that none of the demographic or socio-economic/political variables were significantly related to behaviors related toward CSR (See Table 4). All adjusted $R^2$ had a difference of less than .03, indicating minimal shrinkage due to a theoretical correction for sampling error. Table 4 presents the regression summary table for each model, including beta weights.

As expected, attitudes toward CSR were strong predictors of consumer behaviors relating to CSR, providing general support for $H1$. Although, it should be noted these findings are based on the overall attitudes and behaviors consisting of all the dimensions of CSR. Our findings indicate support for $H2a$ as the results indicate a positive statistically significant correlation between females and attitudes toward CSR.

Model 3 was of the greatest interest to this study as we were specifically looking to examine the effect of gender on actions related to CSR. As noted by TABLE 4, Model 3 was statistically significant at the $p < .001$ level with attitudes accounting for 74.9% of the obtained effect. Although, we also see the gender variable female was also statistically significant and accounted for approximately 25% of the obtained effect which provides further support for $H2b$. It should also be noted that including the gender variable in Model 3 did have a statistically significant positive increase in the $R^2$ from Model 2.
The models tested were quite strong, with relatively large effect size (see Table 4) that did not decline substantially even when correcting for sampling error. Our findings were clear, that behaviors do help to explain CSR action variance. This result was expected, but our findings relating to gender provide evidence that demographics should not be overlooked when implementing and targeting CSR strategies to reach and attract certain consumers.

**DISCUSSION**

**Implications**

The key question to be addressed in the current study is whether companies should consider targeting certain strategies (specifically relating to CSR) toward certain consumer segments (gender) in an effort to encourage those consumers to identify with their company and hopefully purchase their product. More specifically, our study supports the notion that attitudes predict action, and therefore it is important for firms to understand the attitudes of their consumers. Along those same lines and in spite of prior research indicating that there is a “value-action gap” (Pickett-Baker and Ozaki, 2008) our findings suggest that the gap between attitudes and behaviors may be not be as significant as previously hypothesized. By closing the value-action gaps, as illustrated by our findings, there may be some significant implications. Consumers might be increasing their information base regarding CSR and/or possibly more effectively addressing conflicting information or competing advertising claims (Pickett-Baker and Ozaki,
Also, we see that specific consumer segments may identify with a firm’s CSR values and make buying decisions based on that information.

Another significant finding that contributes to the study of CSR is related to gender. Our findings indicate that gender was correlated with both attitudes and behaviors toward CSR as hypothesized as well as being significant in explaining the variance of consumer behaviors. This is consistent with findings in prior literature by Lamasa et al., (2008) where females are more compatible with a stakeholder theory of the firm as they may be more concerned with all parties affected by a firm’s actions and even socially identify with that firm if the firm’s values match their own. Ultimately this study offers further insight into the idea that females may be more concerned with CSR of a firm and will make decisions based on those attitudes toward CSR.

**CONCLUSION**

Corporate social responsibility has become a popular area of interest for academic research as consumers and communities have increasingly been concerned with a corporation’s impact on the environment and other areas of social responsibility. Consumers, as one of an organization’s large stakeholders, are very important to the success and performance of the organization. If consumers’ CSR attitudes are related to their purchase behaviors, which was indicated in our findings, then organizations should be cognizant of this fact when developing CSR policies. Organizations may be able to craft CSR strategies that are not only socially responsible and potentially performance enhancing, but also targeted toward specific demographic segments of their consumer market.

**REFERENCES**


MULTIGENERATIONAL DIFFERENCES IN THE PUERTO RICAN WORKFORCE.

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Maria V. Lugo, Bridgewater College, mlugo@bridgewater.edu

ABSTRACT

This study examines the perception of intergenerational differences among workers in Puerto Rico. An adaptation of the Intergenerational Tension Questionnaire (ITQ) (Choo, 2002) was administered to human resources managers of approximately 500 companies of a variety of types of businesses: manufacturing, service, educational, in Puerto Rico. Results found that there is no difference between younger/older workers in the different aspects related to their jobs and that organizational practices, particularly those associated with recruitment, training, promotions and transfer systems, could alienate older workers to a greater extent than they would younger workers.

LITERATURE REVIEW

For the first time in history, four generations work side-by-side in many, if not all, organizations. The working generations span more than 60 years, including the so-called Traditionalists, Baby Boomers, Generation X and Millennials/Generation Y. These bring different perspectives into the workplace, including work styles, ethics, expectations, and experiences that create what we have heard before- “the generation gap”. Despite the perceived gap, these individuals are the human resources of the organizations and they must work together and achieve the goals established for their businesses. Managers should expect to see more employees with unrealistically high expectations, a high need for praise, difficulty with criticism, an increase in creativity demands, job-hopping, ethics scandals, casual dress, and shifting workplace norms for women (Twenge & Campbell, 2008). It is because of this that we need to thoroughly understand the generations, what these perceived differences or gap may be and develop strategies to maximize these differences.

These are the aspects that identify each generation: the Silent or The Veterans (also called Matures), born 1922-43 (sometimes 1930-1945), lived through World War II and the Korean War. They believe in family values, hard work and dedication. They grew up in an era when most men worked and women reared children. This group is too young to have been World War II heroes and too old to participate in the rebelliousness of the 1960’s. These kids of the Great Depression learned that “children are to be seen and not heard”. They value thrift, hard work and respect for authority. They built on work ethic on commitment, responsibility and conformity as tickets to success. A command and control approach comes naturally to the members of this generation.

"They are loyal to employers and expect loyalty in return. They expect to receive promotions and raises based on tenure and time with the company, not productivity, and to be taken care of into retirement - what some describe as a cradle-to-grave mentality," Johnson said.
The **Baby Boomers**, born 1943-60 (some say 1946-65), grew up in economic prosperity at a time when children's needs and wants were at center stage. They grew up with the Cleavers, the can-do optimism of John F. Kennedy and hopes of the post World War II American Dream. But the social and political upheaval from Vietnam, Watergate and Woodstock spurred them to rebel against authority and carve lifestyles based on personal values and spiritual growth. While some have called them pampered and self-centered; baby boomers also like teamwork and were taught "to play well with others" in school. In the workplace they are optimistic, service-oriented and willing to do whatever it takes to get the job done. They've witnessed the recession, layoffs and mergers since the 1980s. "You have to remember that 51 million of thesees workers hit the job market at the same time, so they are fiercely competitive. Some call them workaholics," Johnson said. With their vast numbers, baby boomers dominate the workplace. There are now more workers over 40, than workers under 40.

Another generation has been identified more recently called **Generation Jones**. Generation Jones is a term typically used to describe the younger baby boomer generation (people born between 1954 and 1965). The term was brought to life by cultural historian Jonathan Pontell to help explain what he considered a generation lost between Generation X and the Baby Boomers.

Generation Jones stems from the line “keeping up with the Joneses” and can be understood mostly within the American culture. It marks a competitive generation. Individuals born in these years typically had children early, are internet and technologically savvy (despite the reputation of not being so, due largely to their older Baby Boomer counterparts) and were one of the first generations to look at their work more as a career than a job. Many Joneses feel that they share some things with Gen X and some things with Boomers, but they feel there are some major differences. Over 80% of people born between 1954 and 1965 say they fell “in-between” these two generations. Because of this, usage of the Generation Jones term is growing rapidly. In fact, Yale University now teaches Generation Jones in a course called: Managing a Multiple Generation Workforce.

In his article, “Generation Jones: Between the Boomers and Xers”, John Lang indicates that there are fifty-three Americans that are practically invisible. It has been difficult to keep up with them both as a group and individually. But they exist; they have not been properly recognized, ignored but ready to claim their place.

Next we have **Generation X’ers**, born 1960-80 (some say 1965-79, especially after Generation Jones), were street-savvy survivors of latch-key two-income families or were affected by divorce as well as AIDS, violence and low expectations. They saw the stresses of their baby boomer parents and learned to be self-reliant at an early age. They have been labeled “at risk” and denounced as slackers, but they embrace free agency over company loyalty. They are technologically savvy, adaptable, informal and globally oriented.

"Having watched their parent’s burn out, they are interested in a work/life balance and more loyal to people than companies. They will go wherever they see the best opportunities, which mean they're not afraid to job-hop," Johnson said. "They also believe that promotions and raises should come from productivity and results."

"Having watched their parent’s burn out, they are interested in a work/life balance and more loyal to people than companies. They will go wherever they see the best opportunities, which mean they're not afraid to job-hop," Johnson said. "They also believe that promotions and raises should come from productivity and results."
The *echo-boom, Nexters, Generation Y or Millennials*, born 1980 to the present, are the youngest and hardest to categorize. They grew up with computers in their homes, are more tolerant of a diverse society, and have an amazing capacity for multitasking. They benefited from the backlash against hands-off parenting and the cultural elevation of stay-at-home moms. Coming of age during a shift toward virtue and values, they set their sights on meaningful goals. In many ways, their work ethic resembles that of the grand-parents who welcomed authority. In seeking personal and professional fulfillment, they adopted a can-do attitude that characterizes their work ethic.

"Some say they've been coddled and doted on and expect lots of feedback and recognition," Johnson said. "But they are hard-working, confident, [and they] value individual relationships and personal satisfaction. They believe they can work well and do good simultaneously."

With such diverse perspectives, it is expected that the majority of workers experience some type of generational clash of attitudes, ethics, values and behaviors. Despite the differences, workers of all four generations in the 2005 Randstad Employee Review agreed on the importance of "delivering operational excellence with fewer resources" in their companies. They just don't always agree on how to do it.

In Puerto Rico, there has been some research regarding generational differences although not as many as in other parts of the world. A survey conducted in 2007 by Gaither International, it was found that there were basic differences in answering the survey, although there is great similarity in the issues faced by each generation. Wong, Gardiner, Lang and Coulon (2008) found that developed a research on generational differences and their findings suggest that the differences observed where better explained by age than by generational differences. On the other hand, Macky, Gardner and Forsyth (2008) stated that managerial time could be better spent considering employee needs in relation to age (maturity), life-cycle and career stage differences than developing generationally specific management policies and practices.

Significant methodological problems remain in generational research. With that in mind, the question is, are generational differences something that we need to address? Does it affect the workplace? Many interactions between generations in the workplace are positive and often go unnoticed. It’s the negative experiences that get noticed and cause people to expend time, energy and emotional resources. Workplace issues between members of different generations are generally not pleasant or productive. Research indicates that these types of experiences are taking place more often resulting in decreased productivity and employee satisfaction. In short these negative experiences represent a real cost (i.e. falling productivity, increased turnover and lost opportunities) to organizations.

Research into multi-generational issues across a wide variety of different organizations is an active field of study. Current research seems to suggest that varying levels of employee disenchantment, miscommunication and ill will attributed to generational differences exists in all organizations. The research specifically identifies the following:
Generational differences are real

The ideals, values, traits, goals and characteristics held by the four generations currently in the workforce are increasingly different from one another. These differences are often substantial and play a significant role in how members of each group relate to one another. Specific differences between generations include communication styles, work expectations, work styles, attitudes about work/life balance, comfort with technology, views regarding loyalty/authority and acceptance of change.

Generational differences cause misunderstanding

It is widely recognized and accepted that people of different generations are often not on the same page. The lack of commonly held beliefs and experiences across the generations is often the root cause misunderstandings between the generations. Misunderstandings lead to tensions and these misunderstandings are often difficult for co-workers to settle on their own without some form of management/external intervention.

Generational issues impact the workplace

Misunderstandings and strife within an organization negatively impact employee interaction and productivity. Consequently, the entire organization suffers as valuable time, energy and emotions are wasted dealing with crises rather than managing the business. Differing work and life expectations can also create tensions. An example of this is Beutell and Wittig-Berman (2008) findings that mental health and job pressure are two of the strongest predictors of work-family conflict in generational groups.

Generational differences can be minimized

Having a solid understanding of all generations in the workplace is critical. Though differences between generations seem to be increasing, steps can be taken to minimize the negative outcomes. Other research have also highlighted that there another issue and that is how different generations approach ethics. The authors point out that “with value systems and motivation at the heart of ethics, and divergent values systems inherent within the four generational groups, the existed of varied ethical perspectives among co-workers is not a surprise. A common complaint among generations focuses on work ethic. Much of the conflict stems from how the term work ethic is defined and interpreted. The survey “2004 Generational Differences Survey” conducted by SHRM finds that 40 percent of human resource (HR) professionals have observed conflict among employees as a result of generational differences. In organizations with 500 or more employees, 58 percent of HR professionals reported conflict between younger and older workers, largely due to differing perceptions of work ethic and work/life balance. Overall, the HR professionals surveyed are generally positive about relationships among the generations with half saying they work effectively together and 27 percent saying the quality of work frequently improves with a variety of generational perspectives. However, 28 percent of HR professionals
said conflict among generations had increased over the last five years and 33 percent expect it to increase over the next five.

Nearly a quarter of HR professionals say differences over acceptable work hours are the primary sources of conflict, which reflects different perceptions of work ethic and benefits like telecommuting and flextime. Frequently, these complaints came from older workers about younger employees' willingness to work longer hours. Past SHRM research finds that work/life balance is among the most important job-satisfaction factors for younger employees and is typically not as important among older workers.

Other common issues that have been documented, specifically by Len Rothman, an executive and diversity business coach with Action International, is: minimal connections among generations, there are few incentives for boomers to stay, older generations don’t feel valued, younger generations feel discounted, older generations don’t know the full value of their business experience, younger generations don’t appreciate the value of their older generations wisdom, and younger generations are not told of their value in the workplace.

Forty-two percent of HR professionals said their organization had lost GenXers and Nexter employees who believed they could not advance in their careers because veterans and baby-boomers held top positions. HR professionals reported implementing succession-planning programs, offering training or increasing compensation in order to retain younger workers.

From all of these recent studies, it had to be assumed that the Puerto Rican workforce was in the same situation. However, nonetheless this might be the case; it was worthwhile addressing the local population to see if the generational issues, and in the long run, the strategies to be used, are similar to those in other areas.

**PURPOSE OF THE RESEARCH**

There is increasing interest in examining the strengths and challenges of the four generations in the workplace. Skill shortages coupled with higher rates of employee turnover and an increase in grievance claims have led employers to look for reasons behind these alarming trends.

Employers need to be aware of factors contributing to generational differences in the workplace, acknowledge the challenges and strengths to work towards building capacity in their organizations. In Puerto Rico, during the past five years, there has been increasing pressure in the workforce due to other constraints such as plant closings, government employee layoffs, exodus of qualified professionals, among others. It is critical at this point that the remaining workforce remains focused on achieving organizational success and performance.

The purpose of this research is to measure generational differences in the workplace but from the perspective of both younger and older workers. By doing this, managers and other interested in organizational behavior will be better placed to understand the sometimes complex human resources issues found in organizations. Building the capacity of our generations at work
through training is an integral piece of the puzzle that will bridge the gaps in our workplace and improve the quality of service and production of our workforce.

RESEARCH QUESTIONS

Understanding that there are four generations in the workplace and the concept that there is a “generation gap”, the first and most important question is simply: “Do workers feel that there is that “gap” or difference between younger/older workers in the different aspects related to their jobs? Further to this, “Do they perceive that the organization treats them differently because they are of the younger/older age group?” This study, therefore, seeks to extend our knowledge of generational differences in the workplace by identifying employee perceptions. If results reveal that there are potential issues to work with, then the following question would follow: “What are the steps that organizations need to take to bridge these differences?”

METHODOLOGY

To examine the research questions, we closely examined the research conducted by Elaine Eng Choo in 2002 titled *Intergenerational tension in the Workplace: a multidisciplinary and factor analytic approach to the development of an instrument to measure generational differences in organizations.* In order to develop the questionnaire, Dr. Choo developed a 25-item questionnaire and was administered first to an informal group utilizing a small sample of adults ranging from 21 to 70+ years. A second pilot study questionnaire was constructed and administered to a small, stratified random sample of employees from the Western Australia Police Service. Following the data analysis obtained from this questionnaire, the final questionnaire was developed. After requesting the pertinent approval for use in Puerto Rico in 2007, the questionnaire was developed using the 25 questions from the Choo study containing items about the perceptions about adapting to change, influence in the organization, comfortable working with people in the organization, have in common with the other generation, feeling disadvantaged because of the other generation, among other questions. In addition, various demographic items were requested, such as age, gender, background characteristics, education, length of service in their organization, etc.

This adaptation of the Intergenerational Tension Questionnaire (ITQ) (Choo, 2002) was administered to human resources managers of approximately 500 companies of a variety of types of businesses: manufacturing, service, educational, in Puerto Rico. The survey was divided between employees under 40 years of age and employees over 40 years of age. This way we could easily identify a workers generation. The survey was administered via a mailing list. In the following month, a second mailing was carried out. The next month follow-up telephone calls were made to the companies who had not yet delivered their completed questionnaire. The completed questionnaires were then be tabulated and analyzed accordingly to study the perception of generational difference among workers. Seventy-six companies have answered the questionnaire.
The process has taken more than two years to complete, starting from the original documents sent to the last document received. A total of seventy-six companies have answered the questionnaire. The survey was administered through the human resources directors and it was requested that they give out an equal number of questionnaires to employees under forty years old and to employees over forty years old.

SURVEY DESIGN

Although the survey was designed after Dr. Choo’s Intergenerational Tension Questionnaire, it is important to explain the design methodology. Responses to the variables were scored using an likert scale, respondents ranked the variables in each section from “1” to “5” (being 1 the most important) according to the extent that they thought each variable contributed to the intergenerational differences in the workplace.

TERMS AND ASSUMPTIONS

Definition of younger worker and older worker

Forty years of age was chose as the point at which one becomes an older worker. This is especially true in Puerto Rico, where both the Federal and local labor laws specify the age discrimination in the workplace mostly affects labor practices to those over 40 years old. Therefore, the younger worker is deemed an employee under 40 years of age. There is however, apart from the labor laws indicated, no consensus regarding the point at which one ceases to be a younger employee and becomes an older employee. There are certain specifications for retirement purposes (ex. Social Security Administration), but there are variances to this in private company-owned pensions programs. However, the old saying that “life begins at 40” has suggested that 40 years of age is generally accepted as the yardstick differentiating old from young.

Item Construction

As mentioned earlier, Dr. Choo took the necessary steps to construct the questionnaire. Regarding the survey wording, she took into consideration that survey wording is a highly complex process with the choice of words having the power to determine the exact nature of the construct actually measure. To that end, the term intergenerational tension was never specifically referred to preferring generational differences as the desired term. It was necessary to write items specifically for younger or older workers. The items included in the questionnaire were constructed considering generational differences (GD) or organizational practices (OP).

The twenty five items that were included in the questionnaire were as follows:

<table>
<thead>
<tr>
<th>Under 40 questions</th>
<th>Over 40 questions</th>
<th>GD/OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older workers are good team members</td>
<td>Younger workers are good team members</td>
<td>OP</td>
</tr>
<tr>
<td>My organization provides more</td>
<td>My organization provides more</td>
<td>OP</td>
</tr>
<tr>
<td>My organization uses change as a way of replacing workers of my generation</td>
<td>My organization uses change as a way of replacing workers of my generation</td>
<td>OP</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>Older workers show little respect for workers of my generation</td>
<td>Older workers show little respect for workers of my generation</td>
<td>GD</td>
</tr>
<tr>
<td>I feel more comfortable working with people of my generation</td>
<td>I feel more comfortable working with people of my generation</td>
<td>GD</td>
</tr>
<tr>
<td>My generation works harder than the older generation</td>
<td>My generation works harder than the older generation</td>
<td>GD</td>
</tr>
<tr>
<td>Older workers should retire at the earliest opportunity in order to create openings for the younger workers</td>
<td>Younger workers should retire at the earliest opportunity in order to create openings for the older workers</td>
<td>OP</td>
</tr>
<tr>
<td>Older workers contribute positively to my organization</td>
<td>Younger workers contribute positively to my organization</td>
<td>OP</td>
</tr>
<tr>
<td>I prefer working in teams with people of my generation</td>
<td>I prefer working in teams with people of my generation</td>
<td>OP</td>
</tr>
<tr>
<td>My organization is more supportive of older workers of my generation</td>
<td>My organization is more supportive of younger workers of my generation</td>
<td>OP</td>
</tr>
<tr>
<td>Employees of my generation are more supportive of change than are younger workers</td>
<td>Employees of my generation are more supportive of change than are older workers</td>
<td>GD</td>
</tr>
<tr>
<td>Older workers have little regard for the skills and experience of my generation</td>
<td>Younger workers have little regard for the skills and experience of my generation</td>
<td>GD</td>
</tr>
<tr>
<td>Older workers have negative view of my generation</td>
<td>Younger workers have negative view of my generation</td>
<td>GD</td>
</tr>
<tr>
<td>I have little in common with older workers</td>
<td>I have little in common with younger workers</td>
<td>GD</td>
</tr>
<tr>
<td>There are too many older workers in my organization</td>
<td>There are too many younger workers in my organization</td>
<td>GD</td>
</tr>
<tr>
<td>Older workers have little regard for the values of my generation</td>
<td>Younger workers have little regard for the values of my generation</td>
<td>GD</td>
</tr>
<tr>
<td>Older workers adapt to organization change better than do workers of my generation</td>
<td>Younger workers adapt to organization change better than do workers of my generation</td>
<td>OP</td>
</tr>
<tr>
<td>In my organization, I feel disadvantaged because of my age</td>
<td>In my organization, I feel disadvantaged because of my age</td>
<td>OP</td>
</tr>
<tr>
<td>Older workers have too much influence in my organization</td>
<td>Younger workers have too much influence in my organization</td>
<td>OP</td>
</tr>
<tr>
<td>My organization values older workers more that it does workers of my generation</td>
<td>My organization values younger workers more that it does workers of my generation</td>
<td>OP</td>
</tr>
</tbody>
</table>
I get angry because older workers have too much power  
Older workers prefer to work with people their own age  
Older workers have less commitment than workers of my generation  
Older workers show little enthusiasm for their work  
In my organization there is little difference between the generations

<table>
<thead>
<tr>
<th>generation</th>
<th>my generation</th>
<th>GD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I get angry because older workers have too much power</td>
<td>I get angry because younger workers have too much power</td>
<td></td>
</tr>
<tr>
<td>Older workers prefer to work with people their own age</td>
<td>Younger workers prefer to work with people their own age</td>
<td></td>
</tr>
<tr>
<td>Older workers have less commitment than workers of my generation</td>
<td>Younger workers have less commitment than workers of my generation</td>
<td></td>
</tr>
<tr>
<td>Older workers show little enthusiasm for their work</td>
<td>Younger workers show little enthusiasm for their work</td>
<td></td>
</tr>
<tr>
<td>In my organization there is little difference between the generations</td>
<td>In my organization there is little difference between the generations</td>
<td></td>
</tr>
</tbody>
</table>

RESULTS

Survey demographics

Of the 500 questionnaires distributed, a total of 76 questionnaires were completed and returned. This is a total of 15.2% of the total distributed and it exceeded the minimum size sample of 10% expected.

Despite the flexibility of the sample, it was not possible to achieve an equal distribution of respondents per age group or gender (Table 1). Even though there were a greater number of respondents over 40 that were male, as well as under 40 that were female, this did not compromise the integrity of the data. We also found that the majority of the respondents were full time employees (Table 2), with undergraduate degrees (Table 3) both in the Under 40 and Over 40 categories.

Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Under 40</th>
<th>Over 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>36.6</td>
<td>55.8</td>
</tr>
<tr>
<td>Female</td>
<td>63.4</td>
<td>44.2</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Category</th>
<th>Under 40</th>
<th>Over 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Time</td>
<td>36.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Full Time</td>
<td>63.4</td>
<td>97.4</td>
</tr>
<tr>
<td>Contract</td>
<td>100.0</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Table 3

<table>
<thead>
<tr>
<th>Education</th>
<th>Under 40</th>
<th>Over 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Degree</td>
<td>10.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>8.1</td>
<td>8.0</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>74.0</td>
<td>65.3</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>7.6</td>
<td>15.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It is important to note the respondent age distribution for these questionnaires (Table 4). As indicated previously, there were specific, non-scientific factors that were considered to determine the age that is considered a “younger” versus an “older” worker for the purpose of this study. In our literature review, we also pointed out the age groups that determine the so-called “generations”. These are factors that need to be kept in mind due to the age distribution resulting from the research conducted. In the Under 40 group, the greatest percentage of the respondents belonged to the 31-35 age group, while in the Over 40 group; the greatest percentage was in the 46-50 age group. This is not necessarily a significant difference in ages among the participants and may affect the final results of the study.

Table 4

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent</th>
<th>Age Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>1.4</td>
<td>40-45</td>
<td>32.9</td>
</tr>
<tr>
<td>21-25</td>
<td>11.0</td>
<td>46-50</td>
<td>36.7</td>
</tr>
<tr>
<td>26-30</td>
<td>24.5</td>
<td>51-55</td>
<td>12.6</td>
</tr>
<tr>
<td>31-35</td>
<td>36.9</td>
<td>56-60</td>
<td>11.3</td>
</tr>
<tr>
<td>36-40</td>
<td>26.1</td>
<td>60+</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SURVEY ANALYSIS

Each of the questions was tabulated and then the results for Under 40 and Over 40 were compared using the Independent Samples t-Test. According to Vogt (1999) the strength of the independent samples t-test lies in its robustness against violations of its assumptions. The following describes the assumptions and how they were met:
1) The test variable is normally distributed in each of the two populations. This assumption was met.
2) There is homogeneity of variance. Despite homogeneity of variance being assumed, the p-value should be treated with caution when the former is violated (Green, 2000). Therefore in addition to the traditional t-test, an approximate t-test that did not assume equal population variance was computed. It was thus possible to obtain two p-values for all independent
samples t-tests. Where there were differences, the more conservative (homogeneity not assumed) was used.

3) Randomness of the sample and independence of the scores violations were met as the members of each group were chosen randomly and the score on the test variables were independent of each other.

Since the basic purpose of this questionnaire was to compare the variable data on younger workers and older workers, comparisons were made for responses to each item. Using this criterion, the following questions were not significant either as demonstrating generational differences or problems with organizational practices:

- Younger/older workers adapt better to organizational change than do the older/younger generation
- Older/younger workers have too much influence in the organization
- Younger/older workers contribute positively to my organization
- Older/younger workers have less commitment than workers of my generation
- In my organization, I feel disadvantaged because of my age
- Younger/older workers have little regard for the skills and experience of my generation
- Younger/older workers have little regard for the values of my generation
- Older/younger workers have negative views of my generation
- The organization is more supportive of younger/older workers than workers of my generation
- Employees of my generation are more supportive of change than are younger/older workers
- Younger/older workers prefer to work with people of their own age
- I prefer working with people of my own generation
- I feel pressure to retire at the earliest opportunity to create openings for younger/older workers
- Younger/older workers show little enthusiasm for their work
- Younger/older workers show little respect for workers of my generation
- I prefer working in teams with my generation
- I get angry because older/younger workers have too much power
- My organization uses change as a way of replacing workers of my generation

It is interesting to note that it had been pointed out earlier, that the age differences for the largest percentage of respondents could certainly affect the results of the survey. It is here that we note that the age differences do not necessarily mean that there is a “generation” between them and therefore, when answering the questionnaire, they would not answer negatively to the question. Therefore we find here that in general, both younger and older workers see each other similarly rather than differently in the organization.

The questions that did test significantly, or that did prove the assumption, either under generational differences or organizational practices were the following:

- I feel more comfortably working with people of my generation (workers over 40 feel more comfortably working with their generation)
- My generation works harder than the older/younger generation.
I have little in common with older/younger workers. (Workers Over 40 feel they have little in common with the Under 40)

- There are too many older/younger workers in my organization. (Workers Over 40 feel that there are too many younger workers in their organization)
- In my organization, there is little difference between the generations
- My organization provides more opportunities for the younger workers than that of the older generation.
- Younger/older workers are good team members (Data shows that people Under 40 think that older workers are not good team members)

These results suggest that although there is fairly an equal amount of components for perception of generational differences, this suggests that organizational practices rather than underlying generational differences are responsible for the existence of a generation gap in the workplace.

**DISCUSSION AND CONCLUSION**

Generational differences are a feature of human nature. In the simplest form, generational differences are mostly manifested in personal preferences between generations. However, on a broader scale, researchers have reported generational differences in the context of transmission of culture and clash of values. This approach to the impact of generational differences formed the basis of the literature review, which focused on the extent to which underlying generational differences affect workplace relationships. This was based on research conducted in Puerto Rico.

A questionnaire was developed to measure age-related differences along with a number of dimensions to underlie generational differences or organizational practices. The items were based on a questionnaire by Elaine Eng Choo who developed it with reference to the literature on generational differences, the opinions of experts and lay people on intergenerational issues in the workplace and personal experiences of the researcher.

**DISCUSSION OF RESULTS**

**Research question 1**

*Do workers feel that there is that “gap” or difference between younger/older workers in the different aspects related to their jobs?*

The answer to this question is based on the results of the 18 questions that resulted as “not significant”. In this sense, the findings demonstrate that the younger/older workers do not find that this lack of respect or value from the other generation, nor negative views, etc. As indicated previously, this outcome could be because of the lack of “real” generational age difference between the age groups that answered.

**Research question 2**
“Do they perceive that the organization treats them differently because they are of the younger/older age group?”

The answer to this question is based on the results of the 7 questions that resulted as “significant”. Organizational practices, particularly those associated with recruitment, training, promotions and transfer systems, could alienate older workers to a greater extent than they would younger workers. Literature has dealt with this in the context of the psychological contract and with reference to business practices to demonstrate that organizational practices, even those in secure employment, that younger workers are treated more favorably by the organization than the older workers.

Research question 3

“What are the steps that organizations need to take to bridge these differences?”

This questions needs to be answered by the following section.

RECOMMENDATIONS FOR IMPLEMENTATION AND FUTURE RESEARCH

This paper began with what appeared to be an obvious but simple question: Do workers feel that there is a “gap” or difference between younger/older workers in the different aspects related to their jobs? If so, will the different generations currently present in the workplace present strategic challenges for managers? An extensive literature review and primary research reveal that, however obvious, the question is anything but simple.

It is expected that the experience of the generations at work will suggest that generational factors do provide a common frame of reference. Other questions that may possibly arise from the research such as: Does the impact of generational factors moderate or accentuate as a worker ages? Does gender, race, or income strongly affect the perceptions and satisfaction of the various generational workers? At least, from the perspective of the Puerto Rico population under the research conducted, we find that organizational practices are the underlying factors that accentuate generational differences.

With this in mind, what are the steps or practices then that organizations need to take or develop, to assist workers from all ages, to work together and achieve the organizational goals and effectiveness? In his article Bridging the Gap: Reaching Different Generations Effectively, John Buchanan presents what he understands is necessary for successful interactions among generations in the workplace. He stresses that the workplace needs to change and that managers need to be more flexible and creative.

He mentions that even the term “meeting” must be challenged and addressed. “The demand now is for meetings that are closer to home,” he said. “Another trend is shorter duration. Gen X and Gen Y attendees can take in a lot of information very quickly, because they’re used to multitasking. So, if you can make the meeting two days long instead of three, not only does that work as far as their learning style is concerned, but it’s also going to fit into their lifestyle and allow them to get home to their families.”
Another article, *Harnessing Multi-Generational Energy* (2009) by Dr Bob Rausch, a noted American author and motivational speaker views multi-generations in the workplace in terms of the energy they provide to the organization. The way in which a single person uses his/her personal energy impacts everything from performance to productivity and ultimately to the success of the company.

The actions taken by management and supervisors are a crucial role for success in supporting multiple generations. There are similarities and differences among generations and many of these are not ingrained within individuals but dependent upon the context in which it is formed. Individuals within generations are also a diverse group and preferences associated with a particular generation are not necessarily true of all its members. In addition, conflict among generations also stems from errors of attribution and perception rather than from valid differences. Therefore, effective communication is also vital for effective management of the multiple generational workforce.

**Managerial flexibility**

Organizations that have been successful in managing multiple generations have identified what they call the ACORN imperatives. These are approaches that contribute to generational comfort. These approaches include accommodating employee differences by learning about their unique needs and serving them accordingly; creating workplace choices such as permitting the workforce to shape itself around the work been done; nourishing retention, training, coaching opportunities, etc. As a manager in today’s workforce you have to be flexible to the needs and wants of the different generations employed today. As each generation enters and exits the workforce their motivation changes, what motives one generation does not necessary hold true for the others. As a manager being flexible will enable each generation to find a common ground.

**Provide training**

Generational differences in training needs and training styles do exist. Although many employees learn “soft skills”, when formal training is needed, the use of multiple modes of teaching is recommended to address the needs of most workers. Another important aspect to consider is to develop new training programs, so that the older generation will have the opportunity to learn and grow with the company. Also, it will provide the younger generation the opportunity to learn their new job at a faster pace. Developing new training programs will also encourage the company to update its current processes so that the new ideas being submitted by the younger generation will not fall on deaf ears.

**Encourage mentoring**

An equally useful tool managers can use is mentoring, since there are four generation in the workforce today, it is a good opportunity for the more experienced workers to pass down their knowledge and skills they have accumulated over the years to the new and up and coming workforce. This transfer of knowledge along with the technical expertise of the younger
generation will provide a new workforce for companies to build around. That means that when a “boomer” suggests that a love bug has corrupted your files, you better listen. When a Silent suggests you’re shooting yourself in the foot, realize that there may be a memory and wisdom behind the advice.

*Embrace diversity through communication and respect*

Generational conflict is most likely to arise from errors of attribution and perception than from valid differences. In addition, generational clashes often stem from miscommunications in tone or style. The Veteran or Silent Generation, for example, are aware that they might be technologically-challenged; empathy is a better strategy than derision. The younger generations, on the other hand, might have shorter attention spans than their seniors, so they benefit from verbal training than reading documents. Therefore, effective communication is critical in dealing with generational conflict.

Poor teams allow generational differences to divide them; effective teams leverage generational knowledge to better understand and serve their customers and clients. In this sense, a four-generation team can produce stronger results than any single generation. Therefore, managers have to appreciate each generation’s differences, their work ethic, commitment, training needs, and priorities are all different. Although we have four generations in today’s workforce they all can learn from one another. The experienced workforce can appreciate the technology age of the younger generation, and the younger generation can appreciate the commitment and work ethic from the more experienced workers.

Because of the similarity of issues in the Puerto Rican workforce, the recommendations that have been presented are pertinent to this demographic group. It is recommended that research be conducted every five years to determine if the actions taken and the changes that have been implemented develop a healthier workforce that values each of the strengths of the generations on equal terms.

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REVISITING HOFSTEDE’S DIMENSIONS: EXAMINING THE CULTURAL CONVERGENCE OF THE UNITED STATES AND JAPAN

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ABSTRACT

It has been over forty years since Hofstede’s groundbreaking study on cultural values. Since then, there have been drastic changes to the global landscape influenced by political, environmental, and technological factors. Utilizing Cultural Convergence Theory we suggest that increased similarities can be observed in cultures with strong international linkages. Specifically, this study utilized the new Value Survey Module 08 to test theoretically justified hypotheses examining the cultural convergence of the United States and Japan. Results suggest interesting changes have occurred in these cultures, to include a strong trend towards convergence. Implications as well as directions for future research are discussed.

INTRODUCTION

Success in the global market depends on understanding the cultures you are doing business with. For this reason, studies on work-related cultural values continue to show prominence in both industrial and organizational research. The framework for most of this research can be attributed to Geert Hofstede and his initial four dimensions of cultural values, as well as his Value Survey Module (VSM) to capture these dimensions (Hofstede, 1984). The reviews of cross-cultural studies have suggested that Hofstede-inspired research is increasing exponentially (Taras, Kirkman & Steel, 2010). The intent of this current study is to continue this trend while attempting to address potential short-comings in recent cross-cultural research.

The most prevalent short-coming is that researchers still reference Hofstede’s original findings or outdated versions of the VSM for empirical or theoretical support. The challenge of cross-cultural research is to attempt to stay abreast of evolving cultures by evolving our methods of analysis and observation as well. The latest iteration of the VSM has three additional dimensions that were not measured in the original module. However few researchers have utilized this tool to assess values across cultures. To adequately advance cross-cultural research it is essential to use the most advanced available methods.

In order to accomplish this we have two primary objectives. First, this study has collected data from the United States and Japan in order to provide updated information on work-related values of these two cultures. The data was collected to test theoretically justified hypothesis that state that countries with strong international ties like the United States and Japan will undoubtedly inflict their own values and beliefs on the evolving culture of the other, potentially causing a convergence of these two cultures. Second, the data was collected using the most recent VSM 08. The researchers undertook the task of both conducting the initial translation of the VSM 08
into Japanese and collecting the first results from Japanese respondents. Cultures evolve and so should the methods used to assess them. The VSM 08 is the most current method and this study will not only provide an additional translation of the VSM 08 but it will also further validate it as an assessment tool.

A REVIEW OF HOFSTEDE’S VALUE DIMENSIONS

In Hofstede’s original study data was collected from a large multinational business corporation (IBM) with subsidiaries in 64 countries. The data consisted of answers to questions about their values and perceptions of their work situation. Careful post-analysis of the initial and subsequent surveys started to show a “global structure” that could not be suppressed by the idiosyncrasies of the individual countries (Hofstede et al., 1990, p. 288). This initial structure consisted of four individual cultural value dimensions.

The first dimension is power distance. According to Hofstede (1984), power distance is the extent to which the less powerful individuals in a society accept inequality in power and consider it as normal. In high power distance cultures, individuals respect their superiors and avoid criticizing them. In low power distance countries, it is very acceptable to challenge superiors, albeit with respect. The second dimension is individualism – collectivism, which reflects the degree to which a society views its members as individuals or as group members (Hofstede, 1984). In individualistic societies, individuals are primarily concerned with their own interests and the interests of their immediate family. In highly collectivistic societies, individuals are not defined by their own actions but rather the groups’ actions. The third dimension is masculinity – femininity, with masculinity described as cultures where the dominant values are expected to be ambitious, assertive, and competitive. In contrast, in cultures high in femininity there is a dominance of feminine values such as preference for “friendly atmosphere, position security, physical conditions [and] security” (Hofstede, 2001, p.281). Fourth, uncertainty avoidance is the degree to which people in a culture generally prefer structure to risk (Hofstede, 1984). Cultures high in uncertainty avoidance are made anxious by situations that are unstructured, unclear, or unpredictable. On the other hand, cultures low in uncertainty avoidance are reflective, less aggressive, relatively tolerant, and unemotional.

Subsequent research initiated by Michael Harris Bond (Chinese Culture Connection, 1987) revealed a fifth meaningful dimension. This dimension originally labeled “Confucian dynamism” represented the opposing views time orientation has on life and work (Hofstede et al., 1990). This dimension, later termed long-term orientation, refers to the preference for instant reward versus delayed reward (Hofstede & Bond, 1988). More recently, Minkov (2007) proposed three new dimensions: Exclusionism – Universalism, Indulgence – Restraint, and Monumentalism – Flexhumity. From these, post-analysis found that exclusionism – universalism was strongly correlated with power distance and collectivism so it was not been treated as a new dimension. However, the remaining dimensions were. The indulgence – restraint dimension considers indulgence as the value that a society places on relatively free gratification of desires and feelings (Fontaine et al. 2005). Opposite indulgence is restraint, or the values which control such gratification and place limits on individuals’ enjoyment behaviors. Monumentalism refers to the cultural dimension characterized on one extreme by self-enhancement (a tendency to seek
positive information about oneself) and self-stability or self-consistency (a conviction that one should have unchangeable values, beliefs and behaviors that are not influenced by shifting circumstances) (Heine, 2003). At the other extreme are flexhumble cultures. Flexhumity is characterized by humility, flexibility and adaptability to changing circumstances (Hofstede & Minkov, 2010).

Hofstede released the most recent Values Survey Module in 2008 (VSM 08). In this survey, Hofstede measured his five dimensions of culture, and included the two additional dimensions he derived from Michael Minkov (Hofstede, Hofstede, Minkov & Vinken, 2008, p. 2). We argue that as cultures evolve they must constantly be assessed with respect to each of Hofstede’s seven cultural dimensions. We base the argument on the belief that culture is dynamic and evolving due to influential interactions with other cultures, a belief rooted in Cultural Convergence Theory (Barnett & Kincaid, 1983).

THE DYNAMICS AND CONVERGENCE OF CULTURAL

Societies have evolved into groups with distinguishable characteristics that set them apart from other groups (House, Javidan, Hanges, & Dorfman, 2002). One distinguishing characteristic is culture. Hofstedee (1980, p. 25) states that culture is “the collective programming of the mind which distinguishes the members of one human group from another.” The national culture is dynamic and is constantly influenced by changes in the environment (technological, political, legal, etc.) which would by all logic influence cultural values.

There are two opposing views of the changing of values within cultures. One view is that culture is very stable within a society and when cultures change they do so independently of each other (Barkema & Vermeulen, 1997). An opposing view of cultural change is Cultural Convergence Theory. This theory argues that when different cultures experience frequent interactions, the cultures will become more similar over time (Axelrod, 1997). It is based on the premise that culture is affected by outside influences and external changes. Cultural Convergence Theory is an extension of Convergence Theory or as more aptly known in the realm of the physical sciences, the second law of thermodynamics (Kincaid et al., 1983). This foundational theory states that a physical system cannot be stable if not in equilibrium, and that to become stable the various particles or subsystems of that larger systems must interact and converge to reach an equilibrium state (Sachs, 1973). Progress has been made in adapting convergence theory to chemical, biological and social systems (Prigogine & Nicolis, 1977), and appropriately to study the convergence of cultures (Barnett & Kincaid, 1983). The rationale being that national cultures are essentially subsystems of a larger global system. Cultures are open systems that exchange inputs and outputs with other cultures. Due to globalization this interaction has become essential for survival; if cultures did not interact they could reach that point of entropy. To avoid entropy, when cultures interact they must reach stability through a state of equilibrium, this equilibrium is reached through the convergence of cultures. For example, two cultures that become intermingled through trade or communication can influence each other. Given the strong ties between the U.S. and Japan, and the dependency on each as both a trading partner and global ally, it is apparent that a great deal of interaction occurs between these two cultures. Therefore, with respect to cultural convergence theory, these cultures are becoming more alike over time. In
the context of this study, it is proposed that to reach stability and equilibrium, the Japanese culture and the U.S. culture are becoming more similar.

HYPOTHESES DEVELOPMENT

There are signs that the U.S. culture may be influenced by other cultures. One such way is the increasing prevalence of teams and groups in organizations. Concurrently, the traditional Japanese culture has been often viewed as very masculine, collectivist, and long term oriented. However, many years of interaction between Japan and western countries may have led them to become more individualistic, short term oriented and feminist. By utilizing Hofstede’s cultural dimensions as a framework, and comparing our result to those of his original sample, we are able to explore and analyze this convergence of these cultures.

Power Distance

Japan is near the world average in power distance, according to Hofstede’s studies. However, recent trends suggest that the Japanese are beginning to question those in power more frequently. This change has occurred dramatically in the political arena where there have been no fewer than 14 prime ministers in the last 20 years (Economist, 2010). The recent victory of the Democratic Party of Japan in the 2009 elections was a significant event as the party vowed to diminish the power of the bureaucrats. These displays of power change and willingness to criticize suggest that Japan is becoming less tolerant of power distance, a stance very reflective of the U.S.

In the original data from the IBM survey in the 1970’s the U.S. had a value score of 40 and Japan had a value score of 50 on the power distance dimension. Based on our arguments we propose that these value scores will have shifted, and that because of U.S. influence, Japan will exhibit lower power distance.

Hypothesis 1: The cultural values of the U.S. and Japan associated with power distance have become more similar. Specifically, Japan has become lower in power distance which will be more closely aligned with the power distance of the U.S.

Individualism – Collectivism

In previous studies, Japan has tended to lie toward the collectivist end of the individualism – collectivism dimension. Historically, a major factor of Japan’s collectivism was its ability to provide full employment to its citizens (Economist, 1994a). However, there are signs that this close relationship between employer and employee is becoming strained. Further, white collar workers are being laid off due to a bloated management system (Schlender, 1994). Other employers are becoming increasingly reliant on “irregular,” or temporary, workers (Economist, 1994b), a practice already well-established in the U.S.

The U.S. has historically been a very individualistic society focused on entrepreneurial effort and individual success, but there has been a shift away from the “self-made man” image that America
grew up on. Now U.S. culture depends heavily on communal assistance such as social security and welfare. Also, it’s more prevalent to see U.S. students and employees in teams and groups (Townsend, DeMarie, & Hendrickson, 1998). We believe that both countries are moving toward a central position on the individualism scale.

The U.S. had a value score of 91 and Japan had a value score of 41 in regards to the individualism – collectivism dimension in Hofstede’s original study. It is proposed that convergence has occurred between these cultures as the U.S. has become more collectivist and Japan has become more individualistic.

**Hypothesis 2:** The cultural values of the U.S. and Japan associated with individualism – collectivism have become more similar. Specifically, Japan has become more individualistic and the U.S. more collectivist.

**Masculinity – Femininity**

Japan is one of the most masculine countries in the world. In fact, according to Hofstede’s original sample Japan is number one in the world in this dimension, but this too is changing. One reason occurred in 1986, when the equal-employment-opportunity legislation removed many legal barriers to women in the workplace. Women now frequent the workplace. This shift in culture is tempered by the fact that 62% of women quit work after their first child (Wei-hsin, 2005). However, more women are choosing to remain in the workforce even after child-birth.

It is becoming much more acceptable in both countries for women and men to perform the same tasks. The U.S. experienced a large part of this change in the early 20th century, but it has just begun to surface in Japanese culture. This may be part of a global cultural trend toward femininity that is affecting both cultures. The results from the original sample show that the U.S. was less masculine with a value score of 62 while Japan had a value score of 91 on the masculinity – femininity dimension. We propose that both cultures will demonstrate higher values of femininity but that convergence will occur because the change to femininity in Japan has been more drastic.

**Hypothesis 3:** The cultural values of the U.S. and Japan associated with masculinity – femininity have become more similar. Specifically, while Japan and the U.S. have become more feminine, the increased rate of this change in Japan will cause the countries to more closely align on this dimension.

**Uncertainty Avoidance**

Japanese tend to avoid uncertainty but the current and future work environments may be affecting their tolerance for uncertainty. One possible cause of this change is that manufacturers are leaving Japan. This has limited job opportunities domestically and effectively made Japan a “one-shot society” student have one shot to find employment upon graduation or they are frozen out of the market. This will effectively decrease the number of employees that are loyal to a firm and cause an increase in entrepreneurial traits commonly seen in the U.S.
Traditionally, the U.S. is a bit more risk-seeking; however recent trends may cause its citizens to avoid risk. The stock market decline, housing bubble bust, and recession of 2007–2009 have caused many to seek secure, safe returns with their investments (Telegram & Gazette, 2010). Further, the threat of other nations becoming more economically powerful may cause Americans to develop a defensive and conservative stance in which they seek to avoid uncertainty (Zweig, & Jianhai, 2005).

The U.S. had a score of 46 while Japan scored much higher on the uncertainty avoidance dimension with a score of 89. As proposed, the U.S. has become more risk adverse while Japan has become more risk-seeking. These changes in values will cause a convergence of cultures as their scores become more similar.

_Hypothesis 4: The cultural values of the U.S. and Japan associated with uncertainty avoidance have become more similar. Specifically, Japan is lower in uncertainty avoidance while the U.S. is higher in uncertainty avoidance._

Long-Term Orientation

Traditionally a long-term oriented society, Japan is facing factors that may cause its orientation to become more short-term. One major factor is the aging of society. Japan’s working-age population has been in decline for almost 15 years (World Economic and Social Survey, 2007). The effects of an aging society will therefore be felt greater in Japan than in most countries. Fewer working individuals will be taking care of an increasing number of elderly citizens. It is likely that retirement benefits will decrease. Younger workers may begin to focus on life in the short-term as the long-term becomes less attractive. Consequently, as economic power has shifted to the east the U.S. has had to become equally acceptable of Japan’s long-term focus as they commonly take time to ponder decisions. Originally, Japan scored high on this dimension with a score of 77, while the U.S. only scored a 29. We propose that as both cultures have attempted to adapt to the needs of the other, their time orientation has become more similar.

_Hypothesis 5: The cultural values of the U.S. and Japan associated with long-term orientation have become more similar. Specifically, Japan will have lower long-term orientation while the U.S. will have higher long-term orientation._

Indulgence – Restraint

The Japanese are known as savers (Hayashi, 1986), so much so that the government is considering financial services and social security reforms focused at persuading the elderly to release some of their ¥1,500 trillion in household savings (Economist, 2010). The U.S. is a country where it is not frowned upon to enjoy oneself. Overspending on cars and luxury is considered part of life. Because this dimension has no previous measurement, we cannot judge the movement of this cultural dimension over time. However, we do propose that Japan demonstrates values that resemble those described by indulgence and that the values of the U.S. are much more representative of restraint.
Hypothesis 6: Japan’s values will score lower than the U.S. on the indulgence – restraint dimension. Specifically, Japan will demonstrate more restraint while the U.S. will demonstrate more indulgence.

Monumentalism – Flexhumity

Japan has a traditionally flexhumble culture. Individuals in Japan attribute success to external factors and failure to internal factors. Recent trends suggest that Japan is remaining true to their flexhumility traits. At least a few big firms, Sony and Nissan, have hired outside leaders as they face severe competition from abroad (Holstein, 2002). These leaders have had to battle with corporate culture to formulate their turnaround strategies. In the US, success is the result of ability or talent and failure the result of bad luck, other’s errors, or lack of effort. This means that individuals from the U.S. tend to overestimate their own uniqueness. Therefore, the U.S. should fall toward the monumentalism end of the scale. As mentioned this dimension has no previous measurement, so once again we hypothesize as to where the U.S. and Japan will fall on the scale in relation to one another. Given the above argument we feel the U.S. values are more representative of monumentalism and the values of Japan are more representative of flexhumility.

Hypothesis 7: Japan’s values will score lower than the U.S. on the monumentalism – flexhumity dimension. Specifically, Japan will be more flexhumble and the U.S. will be more monumental.

METHODS

Sample and Procedures

The survey was administered to undergraduate students from a midsize university in the southeastern part of the United States and undergraduate students from a midsize university in southern Japan. Once the surveys were collected, and those surveys that contained responses from students with nationalities other than American or Japanese were removed, a total of 237 (N=237) responses were deemed acceptable. Of these, 107 (n=107) represented responses from the students from the United States and 130 (n=130) responses represented students from Japan. Hofstede et al., (2008) recommended that for statistical purposes an ideal size for a homogenous sample would be fifty, our sample far exceeds this criteria.

The samples for this study were selected based on Frey’s (1970) three criteria of accessibility, functional equivalence, and representativeness. While equivalence is not absolutely vital for cross-national surveys (Wu, 2006), an attempt was made to match the samples from these two cultures as much as possible. Functionally, the samples were equivalent because they were all students from mid-size universities from their respective countries. Demographic data collected strengthened the argument of equivalence for this sample. 31% of Japanese respondents were female while 50% of U.S. respondents were female. The majority of respondents from both countries indicated that they were between the ages of 20-24 (65% of Japanese respondents and
86% of U.S. respondents). And finally, 33% of Japanese respondents had at least 15 years of schooling while 34% of U.S. respondents had at least 16 years of schooling.

**Research Instrument**

The instrument used to assess our hypothesized dimensions of culture was Hofstede’s Value Survey Model 2008 (VSM 08). It is a 34-item paper-and-pencil questionnaire developed for comparing cultural values of similar respondents from two or more countries. Respondents indicate their answers using a 5-point Likert scale. The VSM 08 assesses seven dimensions of culture on the basis of four questions per dimension. These dimensions include: power distance, individualism–collectivism, uncertainty avoidance, masculinity–femininity, and long-term orientation. The other two dimensions were added based on the work of Minkov (2007) for experimental purposes in an attempt to capture dimensions not yet covered in previous modules. These dimensions include: indulgence–restraint and monumentalism–flexhumity. The score for each dimension is calculated utilizing a formula derived by Hofstede so that results in most instances will approximate between 0-100. Included in the formula is a constant to be utilized for ‘anchoring” scores which will be described later. The remaining questions ask for demographic information from respondents.

Prior to the VSM 08 was the VSM 94, which was used extensively for 14 years. The VSM 08 is touted as a more complete, yet less complex version of the VSM. However, current reliability and validity of the VSM 08 has to be “taken for granted” (Hofstede et al., 2008, pg. 10). As Hofstede et al., (2008) describes country-level correlations differ from individual level correlations, and thus a reliability test like Cronbach’s alpha should not be based on individual scores but country mean scores. Additional utilization and testing of the VSM 08 will be needed to accomplish this.

At the onset of this research the VSM 08 was not available in Japanese. Thus the researchers undertook the task of providing that initial translation. To accomplish this a Japanese graduate student translated the English version of the VSM 08 into Japanese. The survey was then back-translated into English by a Japanese professor. After some minor adjustments and a few pilot surveys were administered, the English and Japanese version of the questionnaires appeared to match and all criteria for Brislin’s (1970) rules for back-translation were met.

**ANALYSIS AND RESULTS**

A drawback of cross-cultural research is the inability to make direct comparisons. The VSM 08 is not for comparing individuals or even organizations across national cultures. In addition results cannot be compared to published scores (Hofstede et al., 2008). Essential to the VSM 08 is that comparisons be made between matched samples of respondents who are as similar as possible in all criteria other than nationality. The original study was done using subsidiaries of IBM, a matched sample is virtually impossible since it was conducted around 1970. It is suggested that extensions of this research should include two or more matched samples from different countries with one of these countries being from the original IBM set. The new data can then be ‘anchored’ to the existing framework by shifting the new data by the differences of the
old and new scores for the common country. We chose to anchor our U.S. scores from our current sample to those of the original IBM set. Consequently, while convergence or divergence of values can be observed, specific shifts in independent country values will be undetectable. Therefore, the results explained below and shown in Table 1, though very exploratory in nature should still provide important insight into potential shifts in cultural values.

**Power Distance**

From the original IBM set there was a difference of -10 between the scores of the U.S. and Japan. Our current results show a difference of 19.2 between the U.S. and Japan. Though Hypothesis 1 is not supported due to increased divergence, the divergence that has occurred is potentially the result of hypothesized shifts. From the results, power distance values are now higher in the U.S. than they are in Japan. While we cannot determine whether one or both cultures experience a shift in values, a trend towards convergence has occurred.

**TABLE 1**

Comparison of Cultural Values of the U.S. and Japan

<table>
<thead>
<tr>
<th>Value Dimensions</th>
<th>Original Sample</th>
<th>Current Sample</th>
<th>Original Sample</th>
<th>Current Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Distance</td>
<td>U.S. 40</td>
<td>Japan 50</td>
<td>Difference -10</td>
<td>U.S.* 20.8</td>
</tr>
<tr>
<td>Individualism - Collectivism</td>
<td>91</td>
<td>41</td>
<td>50</td>
<td>N/A</td>
</tr>
<tr>
<td>Masculinity - Femininity</td>
<td>62</td>
<td>91</td>
<td>-29</td>
<td>N/A</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td>46</td>
<td>89</td>
<td>-43</td>
<td>N/A</td>
</tr>
<tr>
<td>Long-Term Orientation</td>
<td>29</td>
<td>77</td>
<td>-48</td>
<td>N/A</td>
</tr>
<tr>
<td>Indulgence - Restraint</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Monumentalism - Flexhumity</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Data was anchored to the original U.S. sample results

**Individualism – Collectivism**

The U.S. values have always been very individualistic while Japan was always considered very collectivist. The results for this dimension were probably the most surprising. It appears that a great deal of convergence between the U.S. and Japan in regards to individualism – collectivism has occurred. The original difference was 50 while our results show a difference of -17.85, providing partial support to Hypothesis 2. Again, while we are unable to determine exactly how much each culture or cultures have changed, it is interesting to note that these results suggest that Japan is now more individualistic than the U.S.

**Masculinity – Femininity**

For this dimension we hypothesized that both the U.S. and Japan would demonstrate more feministic values. Yet, we felt that the changes would have occurred more quickly in Japan so that a convergence of cultures would be noticed. The difference for the original sample by Hofstede was -29 and the difference for our current sample is 35.35. For this dimension our
results suggest that there is now more divergence in the values between the U.S. and Japan. While it could be reasoned that this means Japan has become more feminine, this cannot be determined definitively. The only thing these results do definitively suggest is that Japan is now more feminine than the U.S. Regardless, Hypothesis 3 is not supported.

**Uncertainty Avoidance**

Japan’s values in regards to uncertainty have always been higher than the U.S. In the original sample there was a difference of -43. While it was hypothesized that the U.S. has become more risk-adverse and Japan has become more risk-seeking, the opposite is seen in our results. Our sample showed a difference of -63.95. For this to occur, one or both of the cultures had to shift in the opposite direction hypothesized. So in essence either Japan has become more risk-adverse (higher uncertainty avoidance), the U.S. has become more risk-seeking (lower uncertainty avoidance), or a combination of both. Result being that Hypothesis 4 is not supported.

**Long-Term Orientation**

The U.S. was much more short-term oriented in the initial sample. However, the difference has converged from -48 to -13.1. Therefore, the values of one or both countries has shifted in the hypothesized direction. Thus, Hypothesis 5 is supported; the U.S. and Japan have become more similar in regards to values associated with long and short-term orientation.

**Indulgence – Restraint**

There were no previous results comparing the U.S. and Japan in relation to indulgence and restraint. Therefore it was hypothesized that the U.S. would score higher on this dimension thus demonstrating values of more indulgence and Japan would have a lower score reflecting restraint. Our results show a difference of 24.85 thus Hypothesis 6 is supported.

**Monumentalism – Flexhumity**

No previous research comparing the U.S. and Japan on the monumentalism – flexhumity dimension could be found either. It was hypothesized that the U.S. would score higher towards the monumentalism side of the dimension and Japan would score lower towards the flexhumity side of the dimension. Our results showed an extreme difference of 113.65, providing support for Hypothesis 7.

**DISCUSSION**

We hypothesized that the cultures of the U.S. and Japan would have shifted over time becoming more similar. This was based on cultural convergence theory and the belief that cultures that interact will influence the opposite culture to resemble themselves. However, though a trend of convergence was noticed, it was much more extreme than expected. For instance, our results suggest that the relationship of the U.S and Japan in regards to power distance, individualism – collectivism and masculinity – femininity has reversed. Perhaps a shift in power distance can be
attributed to the changing values of the U.S. The growing disparities in U.S. incomes, resentment toward executive compensation, and economic downturn have caused U.S. respondents to perceive greater power distance. The individualism dimension values were not only opposite but also more similar. Japan’s trend to become more individualistic is not surprising considering the extended economic struggles and decrease in stable employment (Economist, 1994a). As entrepreneurship increases, this trend may continue. Finally, while there is likely a global trend towards femininity, it appears that Japan is making this transition quicker than most.

Strong convergence of values was noticed in the dimension of long-term orientation. This was not surprising given that both societies run on business quarters and are technologically developed. Perhaps these factors cause individuals to focus on the short term as a means of survival in business. In contrast divergence of values was noticed in uncertainty avoidance. Descriptors of cultures with low uncertainty avoidance include low stress, hard-work only when needed, and lenient rules for children (Hofstede, 1997). Perhaps this divergence can be blamed on the U.S. as we observe evidence of these descriptors in our culture to include increased obesity, welfare and lack of obedience from juveniles. Lastly, our results for the final two dimensions supported our hypotheses. The U.S. is more indulgent and monumental than Japan.

Ultimately we were able to accomplish our two objectives and our contributions to the field of international management are several. We did collect and analyze data from the U.S. and Japan to update work-related values of these two cultures and continue the advancement of Hofstede-inspired cross-cultural research. Additionally, we provided another theoretical adaptation of convergence theory for cross-cultural research. We also conducted the initial translation of the VSM 08 into Japanese and submitted our translated survey to the Institute for Research on Intercultural Cooperation (IRIC) for utilization and distribution. Our use of the VSM 08 also further validated it as a current assessment tool of cultural values and has provided results for the initial comparison of the values of the U.S. and Japan in regards to the newly added dimensions (Indulgence – Restraint and Monumentalism – Flexhumity).

Limitations

While we believe that this study makes a significant contribution to furthering cross-cultural research, it is not without its limitations. The greatest limitation of this study is the inability to make direct comparisons. The explanations given for a number of our results are speculative at best. While this is a shortfall commonly associated with cross-cultural research it does not dilute the importance and novelty of our results, yet it does prevent the ability to distinguish specific shifts in culture. Next, our sample was drawn from a population of university students. Hofstede’s samples were primarily white collared employees within a single global firm. Additionally, while our sample size met the requirements established by Hofstede, a larger sample and more universal sample would enhance validity.

CONCLUSION

Granted our hypotheses were not all supported, and we have probably generated more questions than we have answered, given the importance and dynamic nature of this topic it is a necessary
step. With the increase in globalization the subsequent influence of cultures on one another is inevitable. As these cultures evolve and change under this influence it is imperative that we stay abreast of these changes. As noted, we suggest that a number of these cultural changes have already occurred.

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EFFECTS OF NATIONAL CULTURE ON JOINT VENTURE PERFORMANCE AND DURATION: A META-ANALYSIS

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ABSTRACT

National culture is one of the main constructs in international business literature. However there is still much controversy regarding the measurement and effects of culture. The objective of this study is to contribute to the solution of the debate by providing cumulative, systematic and significant evidence regarding the measurement and effects of cultural distance construct. For this purpose study analyzes 24 articles in international business research published between 1996 and 2005 with a total sample size of 8225. Findings show that cultural distance has significant effects on joint venture (JV) performance and duration but in opposite directions. Moreover, results indicate the existence of potential moderators such as entry mode, experience, industry effects and relatedness for the future research.

Keywords: cultural distance, joint venture, meta-analysis

Cross-national differences have long been a focal point for strategic management research (Adler, Graham and Gehrke, 1988; Kirkman, Lowe and Gibson, 2006). The question of ‘How implications of management theories handcrafted for Anglo Saxon economies would differ across countries?’ has drawn enormous attention of management and international business scholars (Kwok, Bhagat, Buchan, Erez and Gibson, 2005; Redding, 1994). Thus, scholars from these disciplines developed research streams such as comparative management (Redding, 1994; Adler, 1983) and cultural distance (Hofstede, 1980; Tihanyi, Griffith and Russell, 2005) to account for the effects of national culture (Kelley and Worthley, 1981). One of the widely used constructs of culture is cultural distance and despite hundreds of empirical studies using it, there is still no consensus on this measurement (Tihanyi et al. 2005). A clarification to this issue can be done by a meta-analytical review of cultural distance construct.

A country does not necessarily mean a unique set of conditions for organizations, but there is significant evidence that there is a common culture within a country (Tihanyi et al., 2005, Hofstede, 1980). The difference between an organization’s country of origin and the country of operation, cultural distance; thus, developed as a widely used measure for international business studies (Ricks, Toyne and Martinez, 1990).

There have been several empirical (Barkema, Bell and Pennings, 1996; Grosse and Trevino, 1996 Roth and O'Donnell, 1996; Gomez-Mejia and Palich, 1997; Morosini, Shane, and Singh, 1998), literature reviews (Kirkman et al., 2006; Kwok et al., 2005; Peng, Peterson and Yuh-Ping, 1991) and meta-analysis (Tihanyi et al., 2005) studies on the effects of cultural distance. In their recent comprehensive literature review on the effects of culture based on Hofstede’s (1980) cultural framework (i.e. individualism-collectivism, power distance, uncertainty avoidance, masculinity-femininity and long-term-short-term orientation); Kirkman et al. (2006) developed a classification method based on two dimensions: level of analysis (i.e. individual, group/organizational and country level) and type of cultural outcomes (e.g. entry mode, foreign direct investment, work related attitudes, JV characteristics and performance). From the list they have presented in their literature review, country level studies based on entry mode, international diversification and Multi-National Enterprise (MNE) performance have been subject to a meta-analysis (Tihanyi et al., 2005). However, as the scholars state the study did not yield significant effects between cultural distance and JV performance:
Regression results failed to provide statistical evidence of significant relationships between cultural distance and entry mode choice, international diversification, and MNE performance. The examination of moderator effects, however, yielded important results (Tihanyi et al. 2005; 271).

As a remedy to insignificant results above, I address the relationship between cultural distance and performance by separating the performance and duration outcomes. I argue that the effects of cultural distance on JV performance and JV duration are in opposite directions.

To analyze this argument I implement a meta-analysis on the country level effects of culture, which is mostly measured by cultural distance, on JV performance and durations. I divide the analysis for performance and duration outcomes to measure their distinct mean effect sizes. I also analyze some literature driven potential moderators as a reference for future studies.

This study continues as follows. I will first present the literature on international JVs and the role of cultural distance. I will then discuss the literature on cultural distance and performance relationship and propose separation of duration effects as a solution to the conflicts in the literature. Following the literature review and hypothesis development, I will elaborate the sample, variables and meta-analytical procedures used to test my hypotheses. I will then evaluate the results and discuss their implications. Finally I will present the contributions and limitations of the study and give some directions for future research.

INTERNATIONAL JVS AND THE ROLE OF CULTURAL DISTANCE

In the literature, JVs are generally defined as a new organization (both officially and financially) established by two or more parent firms to serve for their different goals (Pfeffer and Nowak, 1976; Li, Lam, and Qian, 2001). They have been the most preferred way to enter new markets for MNEs (Beamish and Banks, 1987).

Frequently parent firms that invest in JVs have different backgrounds and international JV survival depends on their ability to overcome these differences and determine ways of doing business together. This process includes reaching a consensus on JV objectives and updating them to adopt changes in the operational environment (Doz, 1996).

The negotiation is more difficult when the joining partners are originated from different countries (Hennart and Zeng, 2002). Therefore, cultural variance is often referred as the fundamental reason of JV disintegration (Brown, Rugman and Verbeke, 1989; Lane and Beamish, 1990; Shenkar and Zeira, 1992). To explain the effects of national culture on JV survival and performance, scholars first attempted to operationalize cultural as a construct.

National cultural differences or “cultural distance” as often referred, have attracted considerable scholarly attention in MNE entry strategies, organizational characteristics and performances (Barkema et al. 1996; Brouthers and Brouthers, 2001). Cultural distance is extensively applied in most business disciplines (Shenkar, 2001). Particularly in management literature the construct is used to explain several research questions related to organizational change, foreign entries, innovation and technology transfers (Gomez-Mejia and Palich, 1997) and JV performance (Black and Mendenhall, 1991).

Implications of the cultural distance construct were addressed within aspects of transaction costs, country specific risks and managerial decision-making. Recent research particularly underlies the effects
of managerial differences based on national cultural values as a result of different MNE country of origin and the foreign country of operations (Tihanyi et al. 2005).

As an abstract and complicated concept, it has been very difficult to operationalize culture (Boyacigiller, Kleinberg, Philips and Sackmann, 1996). As a solution to these issues, cultural distance is a very well accepted and simplified measure of culture that enables the researchers to use the construct within quantitative empirical studies (Kogut and Singh, 1988; Shenkar, 2001).

The most important challenge regarding the operationalization of national culture is the lack of consensus on the definition among social science researchers (Triandis, 1994). Scholars focusing on the issue define culture as the set of characteristics for a society in terms of norms, values and institutions that help to distinguish that society from others (Tihanyi et al. 2005; Hofstede, 1980; Trompenaars and Hampden-Turner, 1998). Culture has different implications on different levels. Within individual and national levels of culture, international business scholars are interested in the national level implications of it.

In his seminal piece on cultural distance, Hofstede (1980) proposed that since individuals share similar values in a country, firms consisting of these individuals are shaped by these values. Therefore firm values are mostly based on the national culture and different from JV parents originated from other countries (Hofstede, 1980; 1997). These differences result with difficulties on goal agreements, problem solving and conflict resolution (Hennart and Zeng, 2002). Hence, the cultural distance construct, since its first development (Hofstede, 1980), has been enormously influential in the international business literature and has become an indispensable control variable in all studies (Cho and Padmanabh, 1995).

In understanding the role of cultural distance (CD), international business studies hypothesize that, when the cultural gap between country of origin and country of operation increases, MNEs’ operational capabilities in the host country will decrease (Gomez-Mejia and Palich, 1997; Hennart and Larimo, 1998). The main reason for these difficulties is the problem of understanding the opposite national norms, values and institutions, which create the social interaction in its markets (Tihanyi et al. 2005). It is also argued in the literature that CD increases the complexity in the environment for managerial decision-making processes (Shane, Venkataraman and MacMillan, 1995).

Implicit assumptions of applying cultural distance in international business research are that these cultural differences increase the entry costs, decrease the synergetic operational benefits and obstruct the firm’s capability to transfer its core competencies into new markets (Bartlett and Ghoshal, 1989; Palich and Gomez-Mejia, 1999). CD is used to clarify different strategic and organizational topics like entry mode selection (Barkema et al., 1996), geographic diversification (Grosse and Trevino, 1996), JV management (Roth and O’Donnell, 1996) and performance (Gomez-Mejia and Palich, 1997; Morosini et al., 1998; Tihanyi et al., 2005).

In spite of its general acceptance and attraction, CD is not without its flaws and limitations. Some scholars question the conceptualization and measurement problems which depend on the underlying assumptions. They argue that this threatens the validity of the construct and negatively impacts the theoretical and empirical contributions (Shenkar, 2001).

Recently the limitations of the construct have been extensively discussed as scholars continue to use the same measures based on CD. Shenkar (2001) argues that corporate culture can influence the outcomes of national culture. He also suggests the use of interaction effects in order to overcome some of its limitations (Cho and Padmanabh, 1995; Shenkar, 2001).
Moreover, Brouthers and Brouthers (2001) and Evans and Mavondo (2002) claimed that despite numerous research efforts using the construct, there is not yet a consensus on the effects of CD on the fundamental strategic and organizational outcomes. Therefore the literature lacks a systematic assessment of studies on the effects of CD to rigorously present whether the construct should be used for the next studies in the literature (Tihanyi et al. 2005).

\[ \text{H1: Cultural distance is a significant determinant of JV performance.} \]

CONFLICTING EFFECTS OF CULTURAL DISTANCE ON JV PERFORMANCE AND DIFFERENTIATING LONGEVITY

Prior literature pointed out that culture could be regarded as a resource and will affect the actions and performances of JVs (Li et al. 2001). In general CD is considered as an obstacle to JV performance (Shenkar, 2001) since it decreases the ability of MNE to adapt and perform in new markets (Chang, 1995). The effects of national culture are analyzed from several aspects, such as managerial decision-making, leadership style and human resource management (House, Hanges, Ruiz-Quintanilla, Dorfman, Javidan, Dickson, Gupta and Associates, 1999). These aspects are proved to influence firm performance while adapting to a new environment (Li et al. 2001).

Cost, customer and risk management in new markets are important determinants of performance, however when the cultural distance increases, management of these issues becomes more problematic (Tihanyi et al. 2005). Additionally scholars argue that the differences in national culture will lead to conflict within the organization and result in lower performance (Luo and Peng, 1999). The implicit theoretical reasoning is that the intra-organizational conflict will lead to difficulty in implementing organizational strategies into actions. Further, senior executives of culturally distant JVs will not be able to benefit as much from scope and scale economies for R&D, marketing, distribution and production functions of their parent organizations (Tihanyi et al. 2005). High CD can also increase training and controlling costs which in turn decreases the JV performance (Egelhoff, 1982; Schneider and DeMeyer, 1991).

Researchers of the internationalization literature argue that firms can benefit from the numerous cultures within the organization to acquire key resources (Tihanyi et al. 2005; Kotabe, 1990; Kobrin, 1991). Being located in new innovative environments (Birkinshaw, 1997) and new sources of creativity (Shane et al. 1995); firms can create an exclusive set of resources that will enable them to increase their performance (Morosini et al. 1998; Tihanyi et al. 2005).

These conflicting results are also evident in the relationship between cultural distance and JV duration (Shenkar, 2001). While some scholars concluded that JVs established by partners with high cultural distance will shortly fail (Li and Guisinger, 1991), others proposed that joint partners would not let their affiliates fail immediately if the cultural distance with the new market is high (Barkema et al. 1997; Hennart and Zeng, 2002).

I argue that in order to correctly assess the effects of cultural distance, we should differentiate the performance construct from the duration construct and analyze them separately. Based on the findings discussed above, I propose that CD has a negative significant impact on JV performance and a positive significant impact on JV duration:

\[ \text{H2: Cultural distance negatively affects JV performance.} \]
H3: Cultural distance positively affects JV duration.

METHODS

Sample

For identification of studies in this meta-analysis I employed three consequent search procedures. First I made an electronic database search on EBSCO, JSTOR and Science Direct databases by using the keywords: “national culture, cultural distance, Kogut and Singh index, Ronen and Shenkar index, international JVs, JV performance, JV duration, JV length and JV longevity”. Second, I scanned the literature reviews of the articles that I found in the first step to identify additional relevant studies. And finally, I searched for previous literature reviews (Kirkman et al., 2006; Kwok et al., 2005; Peng et al., 1991) and meta-analysis (Tihanyi et al., 2005) studies, which included the relationship between cultural distance and performance and scanned them to determine additional studies.

As an inclusion criterion, I looked for zero-order correlations or other effect sizes that can be transformed into correlations between the focal relationships (Lee and Madhavan, 2010). I did not include the measures of association, which account for the effects of other variables, like beta coefficients from regression analysis or partial correlation coefficients (Lipsey and Wilson, 2001). I also omitted the studies that used the exact same samples of a previous study (Hunter and Schmidt, 1990).

In total I examined 92 related studies and when the inclusion criteria was applied, the final set included 24 articles with the total sample size of 8225. The year range of selected articles is 1996 to 2005. Sample details, employed variable types and direction of the results of these articles are presented on Table 1 below.

| TABLE 1 |
| List of studies included in the meta-analysis |
### Variables

In this research stream, although there has been a debate on the operationalization of national culture with cultural distance construct, almost all of the studies used the index measures developed by Kogut and Singh (1988) or Ronen and Shengkar (1985) based on Hofstede’s culture dimensions. Only four of the studies used different measures (country of origin, survey based measures or dummy variables). Therefore there was not a large enough sample size to control for the measurement of our independent variable, cultural distance.
There have been nine different operationalizations of firm performance, but most of them were common performance measures such as return on equity, return on investment, and return on assets. For the operationalization of JV duration, the most common measure was operation length in years.

Operationalization of control variables was based on the performance and cultural distance measure choices. The control variables that were used in more than three studies were included in our analysis. These are: entry mode, experience, industry, R&D expenses, relatedness, risk and size.

Meta-analytic Procedures

Throughout this meta-analysis I followed the steps of Lipsey and Wilson (2001). I first transformed Pearson product-moment correlations ($r$) into $z$ values, since $r$ is not an unbiased estimation (Lee and Madhavan, 2010; Hunter and Schmidt, 2004). Then I calculated standard error and inverse variance weights to further specify the weighted mean effect size, the standard error of the mean effect size and upper and lower bounds of confidence intervals (at 95% level). A confidence interval, which does not include zero, shows that the mean effect size is statistically significant at the specified level, which is 95% in this study (Lipsey and Wilson, 2001). To test for the homogeneity of the effect size distribution, I calculated the $Q$ statistic, which is in chi-square terms. The null hypothesis for the $Q$ statistic is that effects of the sample are constant (Lee and Madhavan, 2010). Therefore, if the $Q$ statistic is significant ($p<0.05$), this means there are potential moderators for the focal relationship (Lipsey and Wilson, 2001). For interpretation purposes, after all of the calculations, I transformed $z$ statistic back into $r$.

RESULTS

Results of the meta-analytic assessment are summarized in Table 2. In the overall model I included JV performance and JV duration together as dependent variables. Consistent with the findings of Tihanyi et al. (2005), I could not find a significant relationship. The weighted average effect size for the overall model is negative (-0.021), but since the 95% confidence interval includes zero, this effect is not statistically significant.

Supporting my proposition regarding the insignificance of the results of previous meta-analysis, when I reran the analysis by using JV performance and JV duration as separate dependent variables, both results were statistically significant. This also supports Hypothesis 1; meaning cultural distance is a significant measure of JV performance and duration. The weighted average effect size for cultural distance and JV performance relationship is -0.087 ($p<0.05$). The 95% confidence interval (-0.115; -0.059) does not include zero indicating that a significant negative relationship exists between cultural distance and JV performance. This result provides strong support to Hypothesis 2. The $Q$ statistic for the homogeneity test was large and statistically significant ($Q=60.743, p<0.05$). Therefore I rejected the null hypothesis and concluded that there may be potential moderators that influence this relationship (Lipsey and Wilson, 2001).

TABLE 2
Meta-analytic estimates of $r$
For the relationship between cultural distance and JV duration, mean effect size is 0.118 (p<0.05) and the 95% confidence interval does not include zero, meaning there is a significant and positive relationship between these variables (CI; 0.077; 0.159). These results provide support for Hypothesis 3; meaning there is a positive significant relationship between cultural distance and JV duration. The homogeneity statistic was again large and significant (Q=30.484, p<0.05), pointing out potential moderators to this relationship.

Finally, to account for the “file drawer” problem and biases due to sampling and increase the plausibility of the research (Rosenthal, 1979; Lipsey and Wilson, 2001), I also calculated “Fail-Safe N” numbers. As Lipsey and Wilson (2001) articulate “Fail-safe N represents the number of future null comparisons needed to bring the population correlation down to 0.05”. In cases where the confidence interval for r is already below 0.05 (like in our overall model), it is meaningless to compute Fail-Safe N. Following the equation from Lipsey and Wilson (2001), I found that 12 null comparison studies would be needed to bring mean for JV performance to 0.05 and 11 studies for JV duration. This number is small since the number of studies in our sample is low and mean effect sizes are already close to 0.05. This indicates that the “file drawer” problem can be an issue for the present study.

**Potential Moderators**

Results for both of the estimates indicated potential moderators as discussed above. Since the number of studies using each potential moderator was low, it was not possible to implement a moderator analysis for my sample. However, in order to shed light and set a starting point for the future research I attempted to identify potential moderators. I therefore collected effect sizes for the correlations of entry mode, foreign experience, industry effects, R&D expenses, relatedness, country level risk and JV firm size with JV performance. Number of effect sizes was limited for these variables in relation to JV duration and therefore I excluded them from the analysis. Then I implemented the same meta-analytic procedures that I discussed above to obtain weighted mean effect sizes, 95% confidence intervals. Results are shown in Table 3.

**Table 3**

<table>
<thead>
<tr>
<th>Potential Moderators</th>
<th>N</th>
<th>K</th>
<th>Mr</th>
<th>SE</th>
<th>95% LB</th>
<th>95% UB</th>
<th>Q</th>
<th>Fail-Safe N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Model</td>
<td>7202</td>
<td>25**</td>
<td>-0.021</td>
<td>0.012</td>
<td>-0.044</td>
<td>0.001</td>
<td>156.774*</td>
<td>N.A.</td>
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<tr>
<td>JV Performance</td>
<td>4892</td>
<td>16</td>
<td>-0.087*</td>
<td>0.014</td>
<td>-0.115</td>
<td>-0.059</td>
<td>60.743*</td>
<td>12</td>
</tr>
<tr>
<td>JV Duration</td>
<td>2310</td>
<td>8</td>
<td>0.118*</td>
<td>0.021</td>
<td>0.077</td>
<td>0.159</td>
<td>30.484*</td>
<td>11</td>
</tr>
</tbody>
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Note: N=total sample size, K=number of effect sizes, Mr=mean correlation, SE=standard error, LB=lower bound, UB=upper bound, Q=Q statistic, Fail-Safe N represents the number of future null comparisons needed to bring the population correlation r to .05. *p<.05, **Overall model includes more than one effect sizes for some studies.
According to findings, four of seven potential moderators have significant relationships with JV performance. These potential moderators are: entry mode ($r=0.097$, CI (0.049; 0.145), p<0.05), experience ($r=-0.063$, CI (-0.108; -0.017), p<0.05), industry ($r=0.119$, CI (0.066; 0.172), p<0.05) and relatedness ($r=-0.078$, CI (-0.126; -0.031), p<0.05).

**DISCUSSION**

Results suggest that cultural distance does not have a significant effect on performance if JV duration is also included as a part of performance. When separated however, they both provide significant mean effect sizes supporting the hypotheses of this study.

As hypothesized and discussed in the previous literature, I found a significant negative effect of cultural distance on JV performance. According to literature, reasons for this relationship are: difficulties of management (Tihanyi et al. 2005), intra-organizational cultural conflicts (Luo and Peng, 1999), and problems in implementing organizational strategies and goals, disability to benefit from scope and scale economies (Tihanyi et al. 2005) and culture driven extra costs (Egelhoff, 1982; Schneider and DeMeyer, 1991).

Surprisingly the accumulative effect size for cultural distance and JV duration was strong and positive. This finding supports the arguments of Barkema et al. (1997) and Hennart and Zeng (2002) that joining partners will be more willing to invest in and tolerate the failure for their affiliates and keep supporting them for a longer time if the cultural distance is higher.

Findings also pointed out the potential existence of moderators for both relationships. Based on my analysis to identify potential moderators in cultural distance and JV performance relationship, some variables that were employed in previous research were prominent as potential moderators. Entry mode, foreign experience of parent firm, industry effects and relatedness has significant cumulative relationships with JV performance. Utilization of these relationships is recommended for moderation analysis in future research.

**Implications and Future Research**

National cultural differences have always been an important aspect of business related disciplines. Its importance and attractiveness resulted with the emergence of international business research, which mainly deals with the international implications of local strategic and organizational findings.
Hence culture has been the most influential and indispensable construct of international business research. However the contradictions and problems regarding the measures and effects of culture are not yet resolved. The objective of this study is to contribute to the solution of this ongoing debate by providing cumulative, systematic and significant evidence regarding the measurement and effects of the cultural distance construct.

Although there have been attempts to cumulate the findings regarding cultural distance and performance, these attempts could not yield significant results (Tihanyi et al. 2005). This study succeeds to obtain significant results by separating JV duration from JV performance.

Findings have important contributions to the international business literature. First, results for JV performance and JV duration present a complementary explanation to the issue. Although cultural distance negatively affects JV performance due to cross cultural differences and conflicts; JV survival and duration is positively influenced by higher cultural distance. This is because partner organizations are more tolerant and committed to their entities located in more culturally distant countries and give unconditional support to them even though they present poor financial performance (Tihanyi et al. 2005; Luo and Peng, 1999; Egelhoff, 1982; Schneider and DeMeyer, 1991; Barkema et al. 1997; Hennart and Zeng, 2002). These findings will help to clarify the ambiguity regarding the effects of cultural distance.

Second, this research has shown that the cultural distance construct significantly contributes to prediction of JV performance and JV duration. The separation of performance and duration effects may well be an alternative remedy for discussions over the cultural distance construct and the contradictory empirical results based on it.

Finally, proposing some potential moderators leads the way for the future research to clarify effects of cultural distance. Using comprehensive datasets, researchers can test these moderation effects to enrich our understanding of the construct and its effects.

This study has several limitations as well. Most importantly the sample size is small, making the findings vulnerable to sampling biases. Future studies can replicate the study with a broader dataset. Data limitations hindered this study to implement moderator analysis as well. A broader set of studies could also be used to apply moderator analysis. As in all systematic reviews, “file drawer” problem is an issue for this study, as we also presented with the aid of a test. Both cultural distance and firm performance are operationalized with several different measures. Hence, future research can also consider measurement differences as methodological potential moderators.

REFERENCES


THE "INTELLIGENT EXPATRIATE": THE ROLE OF CULTURAL INTELLIGENCE AND SOCIAL EXCLUSION IN EXPATRIATE TURNOVER

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ABSTRACT
Cultural ethnocentrism has long undermined effective cross-cultural interactions necessitating development of culture-free conceptualizations of individual differences in international management. Cultural Intelligence offers such a culture-free individual difference variable that holds great potential in international management. In the present paper, the authors offer a review of the literature on cultural intelligence and offer a conceptual model with proposition derived from theory linking cultural intelligence with social exclusion and turnover intentions. The authors conclude with a discussion of implications for selection and training as well as some recommendations for future research.

INTRODUCTION
Despite a seemingly smaller and flatter world due to globalization (Friedman, 2005), diversity in the workplace increases, presenting challenges not only for individuals but also for their organizations (Ang, Van Dyne, Koh, Ng, Templer, Tay, & Chandrasekar, 2007). Globalization has made business organizations so connected that they need to work and interact regularly with employees from different cultural and ethnical backgrounds (Ang, Van Dyne, Koh, 2006). Working with people from a variety of backgrounds can be challenging even for the most capable employees, because cultural barriers can create misunderstandings and undermine effective interpersonal interactions (Ang et al., 2006). Hence, this paper focuses on expatriate assignments since we know that they reflect many of challenges of cross-cultural interaction. Despite extensive research on cross-cultural adjustment and successful completion of expatriate assignments, we find that expatriate assignments continue to exhibit a high rate of failure. Successful completion of expatriate assignments is challenging and failures constitute considerable costs for organizations. Organizations that fail to manage expatriate assignments successfully have been shown to exhibit suboptimal performance, loss of opportunity for market entry, and difficulty establishing and maintaining relationships with stakeholders of their host countries (Dowlong, Welch, & Schuler, 1999). Problems from failed expatriate assignments include the cost of early return, which is estimated to range from $250000-$1250000 (Takeuchi, Tesluk, Yun, Lepak, 2005), failure to complete developmental measures, and low performance of foreign subsidiaries (Dowlong, Welch, & Schuler, 1999). Also, there are costs to the manager himself such as loss of self-esteem, self-confidence and reputation, reduced motivation and willingness to be supportive to others (Dowlong et al., 1999). The inability to adjust to the foreign environments is cited as one of the most frequent reasons for unsuccessful assignments (Caliguri, 2000; Shaffer & Harrison, 1998). Much research has been dedicated to the relationships between adjustment and expatriates’ intentions to return home prematurely.
(Takeuchi et al., 2005; Black & Stevens, 1989; Shaffer & Harrison, 1998). Yet, findings are often inconsistent (Takeuchi et al., 2005) and little research has addressed important individual differences above and beyond international experience (McEvoy, 1993). Hence, we argue that the construct “Cultural Intelligence” be given increased attention as a predictor of mechanics that trigger premature discontinuation of foreign assignments. The emerging concept of cultural intelligence responds to the need to understand the underlying mechanisms why some individuals perform better in situations that are characterized by cultural diversity.

Therefore, we present a theoretical framework that moves away from the culture specific and organizational characteristics paradigms toward theory that addresses specific individual differences that could serve as predictors of expatriates’ intention to discontinue their assignments prematurely. Specifically, our framework argues that employees’ level of cultural intelligence will determine these employees’ experiences of ostracism/social exclusion, which in turn will influence their intentions to discontinue their assignment prematurely (voluntary turnover).

“Voluntary turnover” has been one of the most salient topics in management research for at least the last half century (March & Simon, 1958, Hom & Kinicki, 2001). Voluntary turnover refers to an employee voluntarily leaving and organization. Every year, companies spend significant sums of money replacing employees who voluntarily separate from their organizations. The costs associated with voluntary employee turnover include disruptions of work, loss of knowledge, skills, and organizational memory (Griffeth & Hom, 2001). A key goal for many organizations is to effectively manage voluntary turnover of employees that is caused by dissatisfaction with their jobs or employers. In the following sections we will review the relevant literature on cultural intelligence, social exclusion, and turnover. Then we will present theory derived research propositions and conclude with managerial implications. The research framework is depicted in Figure 1.

FIGURE 1
LITERATURE REVIEW

“Cultural intelligence is being skilled and flexible about understanding a culture, learning increasingly more about it, and gradually shaping one’s thinking to be more sympathetic to the culture and one’s behavior to be more fine-tuned and appropriate when interacting with others from the culture” (Thomas & Inkson, 2005, p.7). According to Ang, Van Dyne, and Koh, (2006) Cultural Intelligence is an individual’s capability to deal effectively in situations characterized by cultural diversity. CQ includes mental (meta-cognitive and cognitive), motivational, and behavioral components. Cultural intelligence is related to emotional intelligence, but it picks up where emotional intelligence leaves off. Cultural Intelligence (CQ) is defined as “one’s ability to understand and manage one’s own feelings and emotions as well as the feelings and emotions of others.” (Schermverhorn, Hunt & Osborn, 2008, p.15). According to Daniel Goleman, CQ and EI share “a propensity to suspend judgment – to think before acting” (cited in Earley & Mosakowski, 2004, p.140). Furthermore, both constructs separate out two features of an individual’s behavior: those that are universally human and those that are personal and idiosyncratic. A person with high cultural intelligence can separate out an additional behavioral feature: the one that is rooted in culture (Earley et al., 2004). That explains why emotionally intelligent people are not necessarily culturally intelligent. Emotional intelligence presumes a degree of familiarity within a culture and context that may not exist across many cultures for a given individual (Early & Peterson, 2004). A person having high emotional intelligence may be incapable of generalizing across cultural settings, given the cultural signals such as gestures and mimics may be confusing. CQ captures this capability for adaptation across cultures and reflects a person’s capability to gather, interpret, and act upon radically different cures to function effectively across cultural settings or in a multicultural situation (Early & Ang, 2003). Occasionally, we find that a newcomer has natural ability to interpret someone’s unfamiliar and ambiguous gestures in just the way that person’s compatriots and colleagues would, even to mirror them.
Mental CQ (Meta-cognitive; cognitive) predicts cultural judgment, decision-making, and task performance. Meta-cognitive CQ is an individual’s cultural consciousness and awareness during interactions with those who have different cultural backgrounds. Cognitive CQ is an individual’s knowledge of specific norms, practices, and conventions in different cultural settings (Early & Ang, 2003). Cultural knowledge includes an understanding of economic, legal, and social systems, in other cultures that have different cultural backgrounds (Ang et al., 2004). Templer, Tay, and Chandrasekar (2005) found that motivational CQ predicted cross-cultural adjustment of foreign professionals. Motivational CQ is an individual’s drive and interest in adapting to cultural differences (Early & Ang, 2003). Ang and colleagues (2004) conceptualized motivational CQ as a specific kind of self-efficacy and intrinsic motivation (Bandura, 1986; Deci Ryan, 1985). Successful intercultural interactions require basic self-confidence and interest in novel settings. Behavioral CQ refers to and individual’s flexibility in performing appropriate verbal and nonverbal actions when interacting with people who differ in their cultural backgrounds (Early & Ang, 2003). Behavioral CQ related to task performance and general adjustment. Behavioral norms vary across cultures in three ways: the specific range of behaviors that are enacted, the display rules for when specific nonverbal expressions are required, preferred, permitted, prohibited; and the interpretations of particular non-verbal behaviors (Lustig & Koester, 1999). Behavioral CQ describes interpersonal skills and the capability to engage in high quality social interactions in cross-cultural encounters.

In 2007, Soon Ang, Linn Van Dyne, Christine Koh and N. Anand Chandrasekar developed a model that showed the relationship between the four factors of cultural intelligence (CQ) and three different intercultural effectiveness outcomes: Cultural judgment and decision-making (a cognitive outcome), cultural adjustment and well-being (an affective outcome), and task performance (a behavioral outcome). In their first study, Ang and colleagues focused on the relationship between the four factors of cultural intelligence, cultural judgment and decision-making (CJDM) and cultural adaptation. The study incorporated two samples of undergraduate students, one from the US and one from Singapore. Participants had to fill out an online questionnaire on CQ, EI, and Big Five personality followed by a test of general mental ability. Afterwards, they completed CJDM scenarios, rated their cultural adaptation and provided information on demographics and cross-cultural experiences (Ang et al., 2007).

“Judgment and decision-making (JDM) refers to human information processes for making decisions. JDM tasks require deliberate reasoning, evaluation of evidence, and comparison of alternatives” (Ang et al., 2007, p.10). Cultural judgment and decision-making (CJDM) adds to JDM in that it examines the quality of decisions with regard to intercultural interactions. “Effective CJDM requires understanding cultural issues and making appropriate interpretations based on cultural values” (Ang et al., 2007, p.10). Individuals with high cognitive CQ have rich cultural schemas that enable them to recognize and better understand key problems in CJDM. People with an increased metacognitive CQ are capable of understanding others from different backgrounds by anticipating and understanding cultural preferences of others and adjusting their mental capabilities during and after cultural interaction (Ang et al., 2007). Based on that, Ang et al. (2007) proposed that CJDM effectiveness should be positively related to cognitive and
metacognitive CQ. Results of the study confirmed that both metacognitive and cognitive CQ served as antecedents of CJDM.

In 2005, David C. Thomas and Kerr Inkson introduced a model of five stages that focused on the development of cultural intelligence. Stage one focuses on the reactivity to external stimuli. It is the starting point of developing CQ that includes the capability to follow one’s own cultural norms and rules. Most people in this stage do not even recognize differences between various cultures (Thomas & Inkson, 2005). In the next stage, Thomas & Inkson (2005) put emphasis on the recognition of other cultural norms and motivation to learn more about them. In this stage, individuals start to become more curious about other cultures and want to learn more about them. However, many people still struggle with regard to the complexity of other cultural environments. In stage three, an accommodation of other cultural norms and rules is identified. Individuals start to develop a deeper understanding of cultural differences; however, they still struggle to adapt their behavior in cultural diverse situations. “People at this stage know what to say and do in a variety of cultural situations. However, they have to think about it, and adaptive behavior does not feel natural” (Thomas & Kerr, 2005, p.8). Stage four focuses on the assimilation of diverse cultural norms into alternative behaviors. People at that stage are described as culturally knowledgeable and feel comfortable when interacting with people from different cultures. Adapting to different situations seems effortless.

The last stage that can be reached in developing cultural intelligence is described in stage five, but not many individuals are capable of reaching this stage. Stage five places special emphasis on proactive conduct in cultural behavior based on recognition of changing cues that others do not perceive. People in this stage have the extraordinary ability to “sense changes in cultural environments, sometimes even before member of the other cultures” (Thomas & Kerr, 2005, p.8).

Earley and Mosakowski (2004) believed that there are six basic types of managers with respect to cultural intelligence. They range from managers with low levels of CQ to managers with uncommonly high levels of CQ. These types of managers are:

<table>
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<th>Provincial</th>
<th>Highly successful in homogeneous groups</th>
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<tr>
<td>Analyst</td>
<td>Takes time to learn the cognitive differences between cultures</td>
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<tr>
<td>Natural</td>
<td>Inherently high CQ; intuitive</td>
</tr>
<tr>
<td>Ambassador</td>
<td>Confident; adapts quickly</td>
</tr>
<tr>
<td>Mimic</td>
<td>Puts others at ease through observation of physical behaviors</td>
</tr>
<tr>
<td>Chameleon</td>
<td>High level of CQ, very uncommon</td>
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Upon careful analysis, it became evident that the lines between the different categories of managers were not always clearly delineated and often became blurred. In fact, managers are typically hybrids of two or more of these types.
Social exclusion is being or perceiving being excluded from or devalued by desired relationship partners or groups (MacDonald & Leary, 2005). People have a unique and fundamental need to belong; that is, to maintain meaningful, lasting, quality interpersonal relationships with others (Baumeister & Leary, 1995). We attach importance to bonds that are marked by stability, affective concern, and continuity. Thwarted belonging may interfere with one’s ability to contribute to the organization. Organizational research indicates that between 19-66% of employees report experiencing some form of social exclusion at work (Fox & Stallworth, 2005; Hitlan, Kelly, Schepman, Schneider, & Zarate, 2006), and that employee perceptions of social exclusion are related to organizational deviance, job performance, job satisfaction, affective commitment, and turnover intentions (Ferris, Brown, Berry, & Lian, 2008; Thau, Aquino, & Poortvliet, 2007). The desire to be accepted is one of the most basic and pervasive human drives (Baumeister & Leary, 1995). Some individuals become aggressive, while other victims of ostracism seek to respond in a numb and neutral manner rather than with overt displays of emotion. SDB has been found to be outcome of social exclusion. Social rejection reflects badly on oneself. However, isolated individuals who experience social rejection engage in self-defeating behavior, prefer not to repair the relationship with those who ostracized them, and attempt to escape from the situation (Baumeister, Twenge, & Nuss, 2002; Twenge, Catanese, & Baumeister, 2003; Maner, DeWall, Baumeister, & Schaller, 2007). It may remove motivation to contribute to the organization. We argue that this is the connection between social rejection and employee turnover (withdrawal).

Humans have a basic need to form positive social attachments (Baumeister & Leary, 1995; Maslow, 1968; McClelland, 1985). Employees meet their need to belong through various social bonds, including forming multiple social attachments at work (Ragins & Dutton, 2007). This provides them with a sense of self and personal identity (Hogg & Terry, 2000). Turnover theory recognizes the necessity of such relational ties. Voluntary turnover is among the most studied behaviors in management research (Griffeth, Hom, & Gaertner, 2000; Hom & Kinicki, 2001; March & Simon, 1958). According to Mitchell and his colleagues, job embeddedness theory suggests that more links to others enmesh individuals in a web of relationships that restrain turnover decisions (Mitchell et al., 2001). The turnover forces model postulates attachments to others as necessary for understanding turnover because positive work relationships can influence individuals to maintain their current social network at work (Maertz & Campion, 2004; Maertz & Griffeth, 2004). Empirical research provides some evidence that job embeddedness (e.g. Allen, 2006) and other relational constructs (e.g. network centrality, Mossholder, Settoon, & Henagan, 2005) have the potential to make turnover less likely. This thinking extends beyond the workplace, when it has been suggested that relationships outside the workplace can reduce the likelihood of turnover (e.g. Hom & Kinicki, 2001; Mitchell et al., 2001). Further, the underlying mechanisms behind employee turnover are especially important for organizational newcomers. Louis (1980) notes that newcomers need to make sense of the new setting; they need to use other “locals” to help them understand and make attributions about the changes, contrasts, and surprises they find in their new environments. This is true for all newcomers, but perhaps even more so for expatriates who enter a highly uncertain environment. However, we argue that it is equally as important to study those individuals that are deprived of rewarding and lasting social
relationships in order to gain a more complete understanding of relevant organizational outcomes such as employee turnover.

HYPOTHESES

Cultural Intelligence and Social Exclusion

As mentioned before, CQ includes mental (meta-cognitive and cognitive), motivational, and behavioral components. The literature suggests that all facets are important determinants of organizationally relevant outcomes. CQ captures this capability for adaptation across cultures and reflects a person’s capability to gather, interpret, and act upon radically different cures to function effectively across cultural settings or in a multicultural situation (Early & Ang, 2003). Meta-cognitive CQ is an individual’s cultural consciousness and awareness during interactions with those who have different cultural backgrounds. The recognition of the existence of a situation during which cross-cultural interactions will be encountered is a fundamental necessity for the avoidance of failure. When cultural differences between business partners and counterparts are ignored, then the chances of making mistakes that result in social rejection are high. Cultural consciousness and awareness are necessary for cultural adaptation, which occurs (or does not) when people move into new and unfamiliar cultures. “Cultural adaptation includes the sociocultural sense of adjustment and psychological feelings of well-being” (Ang et al., 2007, p.12). Some individuals find it easy to adapt to different cultures while others often experience stress and confusion because of different norms and behaviors that other cultures offer. Ang et al. (2007) hypothesized that motivational CQ has a positive relationship to cultural adaptation. Similarly, we propose that meta-cognitive CQ has a negative relationship to social exclusion.

Proposition #1: Meta-Cognitive CQ is negatively related to social exclusion.

Cognitive CQ is an individual’s knowledge of specific norms, practices, and conventions in different cultural settings (Early & Ang, 2003). Cultural knowledge includes an understanding of economic, legal, and social systems, in other cultures who have different cultural backgrounds (Ang et al., 2004). Expatriates low in cognitive CQ are less likely to be prepared for effective cross-cultural experiences. Without an understanding of the country specific norms, practices, and conventions and expatriate will not be likely to achieve adjustment in the host society. The expatriate will also be more likely to violate norms that are not understood resulting in social rejection from members of the host nation. Hence, we propose that high cognitive CQ is negatively related to social exclusion.

Proposition #2: Cognitive CQ is negatively related to social exclusion.
Individuals high in motivational CQ display an intrinsic interest in other cultures and expect themselves to succeed in situations characterized by cultural diversity (Ang et al., 2007). High motivational CQ provides the foundation for cross-cultural preparedness. Ang and colleagues (2004) described motivational CQ as akin to context specific self-efficacy and intrinsic motivation (Bandura, 1986; Deci & Ryan, 1985). This perceived competency in cross-cultural interactions requires such self-confidence as well as a unique interest in novel settings. When an expatriate has an intrinsic interest in other cultures and expects to succeed in diverse environment, then they are more likely to perform the meta-cognitive and cognitive functions of CQ. They should gain greater expertise in intercultural communication, relocation, and cognitive skills. Consequently, this should help them in their adjustment. Following this line of reasoning, we argue that high motivational CQ ought to be negatively related to social exclusion.

Proposition #3: Motivational CQ is negatively related to social exclusion.

Behavioral CQ on the other hand, encompasses the capability to adapt one’s behavior in various situations, which should be beneficial when it comes to cultural adaptation. Behavioral CQ has been shown to predict intercultural adjustment and well-being, which together form cultural adaptation. We believe that it is important for the successful expatriate to learn the necessary behavior that will allow for a successful transition and integration into the host society. In so doing, the expatriate will be able to build rewarding and lasting relationships in the host society which will allow for an overall successful transition.

Proposition #4: Behavioral CQ is negatively related to social exclusion.

Social Exclusion and Turnover

Theory and practice in employee turnover recognize the importance of lasting and rewarding relationships at the workplace. Mitchell and colleagues found that job embeddedness, links to the organization and its members as well as society and its members, provides a network that buffers turnover (Mitchell et al., 2001). Collectively, positive work relationships can influence individuals to maintain their current social network at work (Maertz & Campion, 2004; Maertz & Griffeth, 2004). People also focus on the norm of reciprocity and equity within their relationships (Gouldner, 1961). Good relationships foster a sense of duty and obligation toward the social network. Excluded people may experience distress (Brockner, 1988); their sense of meaning, identity and well-being may suffer from rejection (Dutton & Ragins, 2006; Hogg & Terry, 2000). Therefore, we argue that an excluded expatriate will be less likely to attempt to reconnect or repair the severed relationships and instead try to find “a way out” by terminating the assignment.
Proposition #5: Social exclusion will be positively related to turnover and will mediate between all dimensions of CQ and Turnover intentions.

IMPLICATIONS

Cultural Intelligence is a vital component to successful managerial functioning of any manager’s job. It is important for managers to understand that successfully communicating and interacting across cultures and in a diverse work force requires cultural intelligence (Triandis, 2006). Much research has been dedicated to the expatriates’ intentions to return home prematurely (Takeuchi et al., 2005; Black & Stevens, 1989; Shaffer & Harrison, 1998). Yet, findings are often inconsistent (Takeuchi et al., 2005) and little research has addressed important individual differences above and beyond international experience (McEvoy, 1993). Experience in international work assignments is widely embraced as a vital asset (e.g. Carpenter, Sanders, & Gregersen, 2001) and potentially as a source of competitive advantage (Spreitzer, McCall, Mahoney, 1997). Experience may also be a requirement for upward promotion for employees (Carpenter et al., 2001; Daily, Certo, & Dalton, 2000).

We believe that the extension of the research we presented in this paper has distinct and significant implications for theory and practice in expatriate selection and training. The decision of which employee is best suited for an overseas assignment is reflective of the necessity that CQ be considered when trying to identify the candidate with the most adequate skill-set for the expatriate assignment. Signs of a lower CQ are not easily apparent. Someone who is highly successful within his or her own culture may have a low CQ. A high understanding of one’s own culture has the potential to inhibit the ability to accept and adjust to a different one. This can alienate someone from team members of different cultures. Similar to IQ, some people have a naturally high CQ. “A person with high cultural intelligence can somehow tease out of a person’s or group’s behavior those features that would be true of all people and all groups, those particular to this person or this group, and those that are neither universal nor idiosyncratic” (Earley & Mosakowski, 2004, p.140). Managers and team members with high CQ “are also more flexible than the average person and thus able to adjust to different organizational environments” (Triandis, 2006, p. 24).

Unlike IQ, an expatriate’s CQ can be increased through training interventions. Among the established methods of training that can increase CQ are: role playing, field visits, and simulations. Developing and increasing cultural intelligence is a long process that requires learning through many experiences and social interactions. The goal of the training is to make a person more empathetic of other cultures or people as well as increasing an awareness of oneself. This involves an understanding of one’s own culture and how other cultures may react to it.

Through training, managers and team members can develop a better cognitive ability to deal with cultural differences. They can discover other cultures and develop four strategies for dealing with conflicts (Brett 2006). These strategies are: adaptation, structural intervention, managerial intervention, and exit. In order for cultural diversity training to be completely effective, it should be unique to the individual.
Last, the implications for theory development in this are include considering other organizationally relevant variables such as performance appraisal and organizational citizenship behaviors. Long term outcomes such as promotion potential are also important at the individual level of analysis. At the organizational level of analysis, the collective cultural intelligence of the top management of an organization and its impact on organizational performance would be an interesting avenue for further research.

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ORGANIZATION DEVELOPMENT AND RELIGION:
AN EXPLORATION OF FIT OR MIS-FIT
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ABSTRACT

The purpose of this paper is to examine the relationship between Organization Development (OD) and various world religions. Organization development is a system-wide application of behavioral science knowledge to the planned development and reinforcement of organizational strategies, structures, and processes for improving organizational effectiveness (Cummings and
Worley, 2009). Religion on the other hand, is a collection of cultural systems, belief systems, and worldviews that establishes symbols that relate humanity to spirituality and moral values.

This paper first explores the two disparate disciplines of Organization Development and Religion. Second, an exploration of four religions or ‘philosophical beliefs’ are assessed using Hofstede’s Cultural Dimensions and measures from House, Hanges GLOBE study. Findings indicate that, consistent with Jaeger’s (1986) findings regarding OD and cultural fit, there is no one religion completely compatible with OD values. Implications provide practical suggestions for future global OD consulting among different religions.

INTRODUCTION

Is there a mystical recipe when possibly a consultant must deliver an OD intervention on a different continent with a different religious or different philosophical belief? Ever since the adoption of the Universal Declaration of Human Rights (1948) the conflicts among religious, political and/or ideological fundamentalism and respect for human rights have been on the world’s political agenda (Hofstede, 2001, p. 177). If so, how can we in the management world assist in reducing global conflicts? Questions such as these are critical to management, to the International and Social Issues Track of the Academy of Management and particularly the Southwest Academy of Management for the 2012 conference.

However, the appropriateness of management techniques of American origin in different cultural settings has been a problem perennially addressed by management theorists with relatively little practical success. Documenting and reporting on successes and failures of American approaches to date has been paltry. This is confirmed by Hinds, Lei and Lyon, in the Academy of Management Annals article “Putting the Global in Global Work: An Intercultural Lens on the Practice of Cross-National Collaboration,” where authors claim that the time is overdue for a more serious investigation of management and culture and for more behavioral, contextual, and dynamic view of culture in studies of global work (Hinds, Lei and Lyon, 2011, p. 178). Their overview suggests that global work has become increasingly widespread in the last two decades. After their review of 38 major journal review articles on global management, their study provided strong evidence that national cultural diversity in global work is intertwined with performance, organizational climate, social identity, work processes, and structure, and that global work is a complex landscape in which culture plays a central and important role (Hinds, Lei and Lyon, 2011, p. 156). Hence, this study hopes to provide an important contribution to the global change management literature.

The purpose and importance of this paper then, in support of Hinds, Lei and Lyon, is to better understand the global management needs, specifically by exploring whether the field of Organization Development and Change can be better practiced by investigating its “fit” with different religious and philosophical viewpoints.

LITERATURE

By investigating the extant body of knowledge one will better understand the challenges of this research. First, an exploration of Organization Development globally, its values, and various
culture models is presented. Secondly, an overview of religion, management, and spirituality and their differences, is explored.

**Organization Development**

Organization development is a system-wide application of behavioral science knowledge to the planned development and reinforcement of organizational strategies, structures, and processes for improving organizational effectiveness (Cummings and Worley, 2009). Recently, OD has been playing an increasingly important role in global social change. But OD scholars Cummings and Worley caution OD work overseas stating, “the applicability and effectiveness of OD in countries and cultures outside of the US are the subject of intense debate” (2009, p. 614). Because OD was developed predominantly by American and Western European practitioners, its practices and methods are heavily influenced by the values and assumptions of industrialized cultures. Thus, the traditional approaches to planned change may promote management practices that conflict with the values and assumptions of other societies.

Even at a broader management level, with particular reference to American management approaches, Boyacigiller and Adler state, “Americans have developed theories without being sufficiently aware of non-US contexts, models, research, and values,” suggesting that management and perhaps OD practices must be more sensitive in an international context (1991, p. 263).

The field of OD rests on a foundation of values and assumptions about people and organizations; therefore, values have played an important role in OD from its beginning. This set of values, assumptions, and beliefs constitutes an integral part of OD, shaping the goals and methods of the field and distinguishing OD from other improvement strategies. Most of these beliefs were formulated early in the development of the field and they continue to evolve as the field itself evolves (French & Bell, 1999). These fundamental values of OD are what distinguish it from other disciplines. According to OD experts Warren Bennis and Edgar Schein, these values include democracy, a matter of choice, and most important, a spirit of inquiry that includes checking the validity of one’s assumptions, and experimentalism (1967).

**Organization Development and Culture**

Culture has generally been synonymous with belief and values broadly held by nations of people, and which do not perceptibly change over decades of evolution (Hofstede, 1980). Based on his IBM-based research from 1970, Dutch Social Psychologist and Organizational Anthropologist Geert Hofstede created a new paradigm for the study of cultural differences: a four-dimensional model of national culture. From the application of a 40-country questionnaire survey, and from these data, four principal factors were extracted. The four dimensions found to differentiate national culture groups were: power distance, uncertainty avoidance, individualism (collectivism), and masculinity (femininity). These are described as follows:

- Power distance is the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally.
Uncertainty avoidance is the extent to which a society feels threatened by uncertain and ambiguous situations by providing career stability, establishing more formal rules, not tolerating deviant ideas and behaviors, and believing in absolute truths and the attainment of expertise.

Individualism implies a loosely knit social framework in which people are supposed to take care of themselves and their immediate families only, while collectivism is characterized by a tight social framework in which people distinguish between in-groups and out-groups; they expect their in-group (relatives, clan, organizations) to look after them, and loyalty to it.

Masculinity expresses the extent to which the dominant values in society are "masculine" that is, assertiveness, the acquisition of money and things, and not caring for others, the quality of life, or people. The opposite of masculine is of course feminine. Associated with high masculinity is a performance orientation. (Hofstede, 1980)

To connect culture to management and subsequently to OD, Hofstede’s model of culture is helpful. Hofstede’s work resulted in a concise framework of dimensions for differentiating national cultures.

Some examples of OD in action via Hofstede’s model include: low uncertainty avoidance means a willingness to take risks and accept organizational change. An individualist believes that involvement with organizations is calculative, whereas a collectivist believes involvement with organizations has a moral basis. If power distance is low, subordinates consider superiors to be "people like me" and vice versa. (1980b, p. 45).

Hofstede suggests that OD does not fit all cultures because persons in every society carry around “mental programs” that guide their behavior, and that these programs are conditioned into members of a given cultural group or society by their common socialization and life experience. Hofstede claims, “Not only will cultural diversity among countries remain with us, it even looks as though differences with countries are increasing,” that “studies at the values level continue to show impressive differences among nations” and that “culture is more often a source of conflict than of synergy—cultural differences are a nuisance at best and often a disaster” (1986, p. xiii). Perhaps other views that allow for convergence of techniques may strengthen the case for OD globally.

Jaeger’s Analysis of OD and Hofstede. To analyze OD’s effectiveness globally, in 1980, Alfred Jaeger re-examined Hofstede’s data and came up with unique findings. In his 1986 AMR article, “Organization Development and National Culture: Where’s the Fit?”, while acknowledging that significant cultural differences between countries exist, an interesting fact emerged. He developed a model with OD values and national cultural values as the variables of congruency. He built on Hofstede’s four-dimension cultural model by developing a model that analyzed OD values within the context of Hofstede’s model. According to Jaeger (1986, p. 87), the OD values such as democratic, optimistic and humanistic when analyzed in the context of Hofstede’s model are rated as follows:
Utilizing Hofstede’s model, he compared the values behind OD to those of various countries and discovered that OD is actually most compatible with Denmark, Norway and Sweden. Thus, the OD principles born in the US apply best in Scandinavia. The US, and other countries such as Australia and UK, have values that are moderately different from those inherent in OD, and still others such as Venezuela, hold values that are diametrically opposed to OD.

Therefore, rather than condemning OD to be captive in the US, as was Hofstede’s earliest implication, a more moderate position is taken, advocating the use of OD in cultures that are compatible with its values, and requiring culturally sensitive modification as needed in other countries. Jaeger’s model was then used to determine congruency of OD with a nation’s cultural values for purposes of interventions or the success of OD. He developed a rating system based on how different cultural values derive from OD values.

As OD has been used successfully in many countries (Sorensen, et al., 2008), there is strong evidence that supports Jaeger’s approach. Specific to this study involving OD and religion, a similar comparison utilizing Hofstede’s and Jaeger’s findings will be incorporated in the methods section of this paper.

**GLOBE Study.** In 2004, global culture experts House, Hanges, Javidan, Dorfman and Gupta published a study on the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program outcomes. The results of their ten-year study validated a cross-level integrated theory of the relationship between culture and societal, organizational, and leadership effectiveness across 62 societies. For the GLOBE study, culture was conceptualized in terms of nine cultural attributes, that when quantified, are referred to as cultural dimensions. GLOBE researchers measured both cultural practices (the way things are) and values (the way things should be) at the organizational and societal levels of analysis. The GLOBE dimensions are similar to Hofstede’s, as shown below:

- **Uncertainty avoidance:** The extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events.
- **Power distance:** The degree to which members of an organization or society expect and agree that power should be unequally shared.
- **Collectivism I—Institutional collectivism:** The degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action.
- **Collectivism II—In-group collectivism:** The degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families.
- **Gender egalitarianism:** The extent to which an organization or a society minimizes gender role differences and gender discrimination.
• Assertiveness: The degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships.

• Future orientation: The degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying gratification.

• Performance orientation: The extent to which an organization or society encourages and rewards group members for performance improvement and excellence. This dimension includes the future-oriented component of the dimension called “Confucian Dynamism” by Hofstede and Bond (1988).

• Humane orientation: The degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others. This dimension is similar to the dimension labeled “Kind Heartedness” by Hofstede and Bond (1988).

An illustration of GLOBE’s measures indicate, for example, that high performance orientation practices scores tend to be related to lack of dominance of a single religion. In societies that score high on performance orientation practices, they do not have stronger religious practices. (House, et al., 259). In summary, OD as an improvement effort is values based, but may conflict with cultures outside of the US with a different values base. The next review is that of Religion so as to assess the possible ‘best religious fit’ between religion and Organization Development.

RELIGION

While numerous single case studies of Global Organization Development exist, currently there is no research intersecting OD and religion. A close area is multicultural OD which does not address the issue of religious beliefs, but involves social and cultural representation of perspectives, world views, life styles, language and management styles – excluding religion.

Research involving OD and religious philosophies included: ‘Organizational development in the Arab world’ (Ali, 1996); ‘Creating Spirit at work: Re-visioning organization development and leadership’ (Cacioppe, 2000); ‘The Shamanic Perspective on Organizational Change and Development’ (Frost, Egri, 1994); ‘Informing an apparent irony in OD applications: good fit of OD and Confucian work ethics’ (Golembiewski, 2005); ‘Human resource management practices on organizational commitment. The Islamic perspective’ (Hashim, 2010); ‘Is there a new OD?’(Marshak, 2005); ‘Ubuntu as a Cultural Strategy for OD and Change in Sub-Saharan Africa’ (Sulamoyo, 2010); and ‘Reflections on a Cross-Cultural Partnership in Multicultural Organizational Development Efforts’ (Ramos & Chesler, 2010). However, no article involved more than a ‘uni’ or single approach to a religious philosophy or belief. Much needed is a study to encompass a multi-approach to understanding OD among different religions.

Similar to Hinds, Lei and Lyon in the AOM Annals article, Jackson and Holvino (1996), make the case that “traditional organization development efforts have not made the kind of impact on social oppression in the workplace that its founders had hoped.” Here an overview of religion, management, and the connected topic of spirituality is provided.

Religion is a collection of cultural systems, belief systems, and worldviews that establishes symbols that relate humanity to spirituality and moral values. There is no doubt that religion is
one of the means for understanding why people behave as they do. Religious institutions have been perceived to play significant roles as intermediaries between human beings and God. For some, God grants the capability to be good, and evil is associated with the devil. In religions of the East, goodness is not associated with God -- there is not even a monotheistic God. So religion spells out how to harmonize oneself with the universal rhythm; through achieving harmony with this cosmic rhythm an individual does what is good. (Kabasakal & Bodur, 2004).

Religion, Spirituality and Work

The discussion about religion versus spirituality is quickly blurred, particularly in the management arena. The Academy of Management now has a dedicated division entitled Management, Spirituality and Religion which is quickly expanding in membership. Professional management journals such as Personnel Journal and Training have carried articles on spirituality, as have Business Week and Fortune. Even a 1998 Wall Street Journal carried a front page article on spiritual direction. There are at least two journals on spirituality: Spirit at Work edited by management professor Judith Neal, and Business Spirit (Cavanaugh, 1999).

Spirituality historically has been rooted in religion. However, its current use in business and in the workplace it is most often not associated with any specific religious tradition. There are several reasons for this separation, one being that most western societies are pluralistic; that is, there is no one dominant religious tradition that can be used as a foundation (Cavanaugh 1999, p. 190).

Others draw a clear distinction between spirituality and religion, claiming that it is important to note that religion (an organized belief system) and spirituality (an inner longing for meaning and community) are not the same thing. Mitroff & Denton (1999) reported that people in the workplace can distinguish between religion and spirituality, and believe that spirituality is an appropriate topic for discussion in the workplace while religion is not.

Many of the spiritual values surrounding the list of characteristics presented emanate from the world’s major religions but are also respected when applied to secular practices and policies (Mitroff, 2003, p. 189). They have arguably been recast from religious traditions as ethical approaches to practices more aligned with the secular discourse that became fashionable in many countries during the twentieth century (Crossman, 2007). Diminishing the newness of spirituality in management, Driscoll and Wiebe’s (2007) question whether workplace spirituality is simply a reinvention of previous academic “wheels” such as “human relations, corporate social responsibility, human resource and organizational development”, does not go far back enough. Religions, although possessing many common fundamental tenets, differ in their prescriptions for social order. According to House, Hanges, et al., whereas all religions by definition promote the acceptance of uncertainty by the very acknowledgement of higher power, different religions impose different degrees of restriction or prescription for personal and social behavior. (House, 2004, p. 634).

In summary, the dominant religion in a society helps to determine the nature of its societal members. This is similar to the relationship that Max Weber, in the early 1900s, identified
between Protestant religions and hard work (1930). As will be discussed, some religions such as Eastern religions, value various ways in which a person can improve him or herself, but these do not consist in believing; rather they involve ritual, meditation, or ways of living. (Hofstede, 2001, p. 363). Other religions, such as Western Protestant religions, value hard work and sacrifice.

**METHODOLOGY**

If a religion can offer the means by which a society can improve itself, perhaps religion can be a lens by which to better predict OD success in other cultures. In an effort to examine Organization Development and its fits with religious or philosophical beliefs from around the world, this study explores four different religious philosophies from four different continents: Asia, Africa, America, and the Middle East. These religious beliefs include: Confucianism from Asia, the Ubuntu philosophy from Africa, Christianity from America, and Hinduism from the Middle East. While there are countless religions and philosophical beliefs, for this study, these four primary religious philosophies from four continents, were deemed appropriate. Religion expert, Stephen Prothero (2011), critically evaluated three of these four religions, and found unique differences in each of the three (Confucianism, Christianity, Hinduism). The concept of Ubuntu is yet even more unique, as described below. For Prothero,

- Confucianism is ‘The Way of Propriety’ – the problem is chaos, the solution is social order, the techniques are ritual and etiquette.
- Christianity is ‘The Way of Salvation’ – the problem is sin, the solution is salvation in Jesus Christ, the technique is some combination of faith and good works.
- Hinduism is ‘The Way of Devotion’ – the problem is samsara (cycle of death and rebirth), the solution is moksha (release) and the technique is devotion (Prothero, 2011).
- Ubuntu is ‘I Am because We Are’ – the problem is how to avoid isolation and vengeance, the solution is harmony and mutual tolerance, the techniques are mediation and conciliation (Sulamoyo, 2011).

Here, a deeper exploration of these four religions will help to illustrate a religion’s fit or misfit with Organization Development. In no specific order, a definition of each of these four religions – Confucianism, Ubuntu, Christianity and Hinduism – follows.

**CONFUCIANISM**

Confucianism can be viewed as a philosophy or a religion. The Confucian heritage in Asian countries helps to explain their populations’ respect for hierarchy, but one may wonder which is older, Confucianism or the hierarchical norm. (Kawasaki, 1969, p. 208).

Confucianism is a way of life as taught by Confucius in the 6th–5th century BC. Confucianism is perhaps best understood as an all-encompassing humanism that neither denies nor slights Heaven. With between five and six million followers, some consider it to be the ‘state religion’ of East Asian countries because of governmental promotion of Confucian values. Confucianism
has been followed by the Chinese for more than two millennia. It has deeply influenced spiritual and political life in China; its influence has also extended to Korea, Japan, and Vietnam. East Asians may profess themselves to be Shintoists, Taoists, Buddhists, Muslims, or Christians - but seldom do they cease to be Confucians.

The most famous Chinese philosopher who espoused aspects of modern-day collectivism was Confucius, who emphasized the importance of conformity to one’s environment. He also stressed the importance of obligations that individuals have within their family, nation, and world at large. Confucius criticized people’s need to be individuals and emphasized the importance of subjugating personal wants and desires for the greater good of the group (Streep, 1995).

Although 4000 years old, this philosophy is still evident today in Asia. (House, 2004, p. 439). The main principle of Confucianism is ren (“humaneness” or “benevolence”), signifying excellent character in accord with li (ritual norms), zhong (loyalty to one's true nature), shu (reciprocity), and xiao (filial piety). Together these constitute de (virtue). Confucianism is characterized by a highly optimistic view of human nature. The faith in the possibility of ordinary human beings to become awe-inspiring sages and worthies is deeply rooted in the Confucian heritage (Confucius himself lived a rather ordinary life), and the insistence that human beings are teachable, improvable, and perfectible through personal and communal endeavor is typically Confucian.

Given the various elements of Confucianism, and in an effort to extend Jaeger’s rating system using Hofstede’s culture dimensions, the dimensions for Confucianism are:

- Power: High
- Uncertainty Avoidance: Complex
- Masculinity: Mid to High
- Individualism: Low

**UBUNTU**

The major philosophical belief in Sub-Sahara Africa is Ubuntu. The belief in ancestral spirits, the supernatural, superstition and animism still influence the psyche of most Africans today. According to Mbigi “in African spirit religion, the spirit represents our ultimate real self, our inner self and total being, and our total consciousness. The spirit is who we really are.” (2000, pp. 36).

Ubuntu is a deep philosophical concept in Sub-Saharan Africa, which refers to humaneness that individuals and group display for one another (Mbigi & Maree, 1995). Ubuntu is the foundation for the basic values that manifest themselves in the ways Sub-Saharan people believe and behave toward each other and everyone else they encounter (Mangaliso, 2001, p. 24). The concept is summed up in the phrase translated as ‘a person is a person through others’ which implies that the relationship and recognition by others is at the core of a person’s identity. Therefore, the norms of reciprocity, suppression of self-interest, the virtue of symbiosis, and human interdependence are essential to Ubuntu (Mangaliso, 2001).
Ubuntu is recognized as being an important source of law within the context of strained or broken relationships amongst individuals or communities and as an aid for providing remedies which contribute towards more mutually acceptable remedies for the parties in such cases. Ubuntu is a concept which:

- is linked to the values of dignity, compassion, humaneness and respect
- dictates a shift from confrontation to mediation and conciliation
- favors face-to-face encounters of disputants rather than conflict
- favors civility and civilized dialogue premised on mutual tolerance
- favors the re-establishment of harmony (Sulamoyo, 2011).

Finally, Desmond Tutu (1999, pp. 34–35) defined Ubuntu as follows:

_Ubuntu_ is very difficult to render into a Western language. It speaks of the very essence of being human. When we want to give high praise to someone we say, “Yu, u nobuntu”, “Hey, he or she has ubuntu.” This means they are generous, hospitable, friendly, caring, and compassionate. They share what they have. It also means my humanity is caught up, is inextricably bound up, in theirs. We belong in a bundle of life.

Given the various elements of Ubuntu, and in an effort to extend Jaeger’s rating system using Hofstede’s culture dimensions, the dimensions for Ubuntu are:

- Power: High
- Uncertainty Avoidance: Mixed
- Masculinity: Mid to High
- Individualism: Low

**CHRISTIANITY**

Christianity is the world’s largest religion, with around 2.2 billion followers split into three main branches: Catholic, Protestant and Orthodox. The Christian share of the world's population has stood at around 33% for the last hundred years. This masks a major shift in the demographics of Christianity: large increases in the developing world (around 23,000 per day) have been accompanied by substantial declines in the developed world, mainly in Europe and North America (around 7,600 per day). It is still the predominant religion in Europe and the Americas. The sacred text of Christianity is the Bible, which consists of the Old Testament and the New Testament. Love of others is certainly the core of the teachings of Jesus Chris in the Bible.

Regarding Christianity’s three branches, **Roman Catholicism** represents the continuation of the historical organized church as it developed in Western Europe, and is headed by the Pope. Distinctive Catholic practices include recognition of seven total sacraments, Sunday mass, devotion to the Virgin Mary and the saints, and veneration of relics and places associated with
holy figures.  

Eastern Orthodoxy (which includes the Greek and Russian Orthodox Churches and several others) is the continuation of the historical organized church as it developed in Eastern Europe. Protestantism arose in the 16th century during the Reformation, which took place mainly in Germany, Switzerland, and Britain. Protestants do not acknowledge the authority of the Pope, reject many traditions and beliefs of the Catholic Church, emphasize the importance of reading the Bible and hold to the doctrine of salvation by faith alone. Protestantism encompasses numerous denominational groups, including Lutherans, Baptists, Methodists, Episcopalians, Presbyterians, Pentecostals and Evangelicals.

With the sheer magnitude of Christianity, it is may be helpful to look at Hofstede’s dimensions for an illustration. In Christianity, the dimension of masculinity versus femininity may be both. For example, Catholicism has produced some very masculine, tough currents (Templars, Jesuits) but also some feminine, tender ones (Franciscans), outside Catholicism we also find groups with strongly masculine values (such as Mormons) and groups with very feminine values (such as the Quakers and the Salvation Army). (Hofstede, 2001, p. 327).

Given the various elements of Christianity, and in an effort to extend Jaeger’s rating system using Hofstede’s culture dimensions, the dimensions for Christianity are:

- Power: Mixed
- Uncertainty Avoidance: Mixed
- Masculinity: Med to High
- Individualism: Med to High

HINDUISM

Hinduism is a conglomeration of religious, philosophical, and cultural ideas and practices that originated in India, characterized by the belief in reincarnation, one absolute being of multiple manifestations, the law of cause and effect, following the path of righteousness, and the desire for liberation from the cycle of births and deaths. It is the third largest religion with an estimated 950 million followers in 2010.

Hinduism is not a religion in the same sense as Christianity is; it is more like an all-encompassing way of life -- much as Native American spirituality is. It is generally regarded as the world's oldest organized religion. It consists of "thousands of different religious groups that have evolved in India since 1500 BCE. Because of the wide variety of Hindu traditions, freedom of belief and practice are notable features of Hinduism. Most forms of Hinduism are henotheistic religions, meaning they may worship one god while acknowledging the existence of other gods. They recognize a single deity, and view other Gods and Goddesses as manifestations or aspects of that supreme God. Henotheistic and polytheistic religions have traditionally been among the world's most religiously tolerant faiths. As a result, India has traditionally been one of the most religiously tolerant in the world.

Hinduism is the religion of more than one billion Hindus, most of who live in India, but there are large populations in many other countries. Hinduism is also known as Vaidika Dharma, meaning ‘religion of the Vedas’ the ancient Hindu scriptures. The Vedas teach that the soul is divine, only
held in the bondage of matter; perfection will be reached within this bond bursts, providing freedom from death and misery.

The doctrine of karma is the answer provided by Hindus to the questions of why suffering and inequalities exist in the world. Hindu religious thought embodies a great variety of ideas, principles and practices, giving rise to various religious schools. One main aspect of Indian/Hindu social life associated with Hinduism is the caste system. Although the cast system was officially outlawed after India became an independent country in 1947, the practice still exists in the minds of many Hindus today. In short, power distance was historically very high, and it remains very high in practice today.

The principles of Hinduism and Buddhism do not encourage hard work focused exclusively on the pursuit of material wealth because these societies judge individual worth less by material achievements than by spiritual orientation, accomplishments, and realizations (Hofstede, 2001). Given the various elements of Hinduism, and in an effort to extend Jaeger’s rating system using Hofstede’s culture dimensions, the dimensions for Hinduism are:

- Power: High
- Uncertainty Avoidance: Low
- Masculinity: Mid to High
- Individualism: Mixed

**FINDINGS**

Based on Hofstede’s cultural dimensions as defined by Jaeger for Organization Development, none of the four major religions described here are consistent or in support of OD values. Using Hofstede’s dimensions, Table 1 illustrates Jaeger’s OD values findings (through Hofstede’s Dimensions), along with the levels of OD scores for each religion and/or philosophical belief.

<table>
<thead>
<tr>
<th>Hofstede’s Cultural Dimensions</th>
<th>OD Values</th>
<th>Confucianism</th>
<th>Christianity</th>
<th>Ubuntu</th>
<th>Hinduism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Distance (PDI)</td>
<td>Low</td>
<td>High</td>
<td>Mixed</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Uncertainty Avoidance (UAI)</td>
<td>Low</td>
<td>Mixed</td>
<td>Mixed</td>
<td>Mid</td>
<td>Low</td>
</tr>
<tr>
<td>Masculinity (MAS)</td>
<td>Low</td>
<td>Mid</td>
<td>Med-High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Individualism (IDV)</td>
<td>Medium</td>
<td>Low</td>
<td>Med-High</td>
<td>Low</td>
<td>Mixed</td>
</tr>
</tbody>
</table>
*based on Hofstede’s Cultural Dimensions (1980).

A discussion of these findings may better illustrate some cultural examples.

DISCUSSION

This study attempted to examine Organization Development and its fit among dominant religions. Religion determines one’s view of the world and one’s alliance to a higher authority and tradition, and the concern whether OD has such a ‘fit’ with major world religions was questioned. According to Hofstede, religion is one of three fundamental ways for human society to cope with uncertainty (alongside law and technology). An elaboration and illustration of each cultural dimension is appropriate.

Power

Power distance is the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally. Religion and power results for OD are mixed, from low to mixed to high. According to Hofstede, power distance is definitely associated with religions life, but it is doubtful that religion can explain power. Power and religion should rather be seen as growing from common roots. Religion can be associated with high power which is associated with more hierarchy and stratification in churches, and elitist ideas about society and religion. Low power and religion can be associated with more pluralist views and prevailing religions and philosophical systems that stress equality.

High power distance is especially true with Ubuntu. Specific to the Ubuntu philosophy, the religious philosophy is consistent with their culture as illustrated by their acceptance of high the power dimension score. African societies culturally are loyal to their leadership which in turn creates a paradox with the notion of equity because loyalty to their leaders may foster inequity between the leader and his/her followers. The dimension of power distance is fostered through the use of proverbs such as the following from the Chewa tribe of Malawi sourced from James (2004):

- ‘Atambala awiri salira mkhola limodzi’ – two cocks do not crow in one kraal (there can only be one leader, so if others are talking they are competing with the leader).
- ‘Wamkulu sawuzidwa’ – he is old...therefore he is right (a leader’s decision is not open for discussion).

Uncertainty Avoidance

Uncertainty avoidance is the extent to which a society feels threatened by uncertain and ambiguous situations by providing career stability, establishing more formal rules, not tolerating
deviant ideas and behaviors, and believing in absolute truths and the attainment of expertise. For this study, the concept of uncertainty avoidance had mixed results, from low to mid to mixed. Generally it is expected that people in cultures low in Uncertainty Avoidance would exhibit a lesser degree of religious involvement to the extent that they do not need to use religion to help them cope spiritually or practically with the uncertainties of life. House, et al., found contrary evidence when they investigated church attendance and religious dogma as measurements, and concluded that the connection between UA and religion is more complicated than that envisioned by Hofstede. (House, et al, 2004).

In countries with stronger uncertainty avoidance norms, religions can be expected to stress absolute certainties and manifest intolerance toward other religions. (Hofstede, 2001, p. 147). Low uncertainty avoidance, as demonstrated in Hinduism and Buddhism, while consistent with OD values, would indicate that one’s own belief should not be imposed on other.

**Masculinity**

Masculinity expresses the extent to which the dominant values in society are masculine, or assertive, through the acquisition of money and things, and not caring for others, the quality of life, or people. (Hofstede, 1980). Findings for the cultural dimension of masculinity encompass all levels – from low to mid to high – for different religions.

As example of this concept is that in masculine countries, God represented in a male image as Father, King, or Shepherd, is felt to be more important in people’s everyday lives than in feminine countries. In a feminine culture, relations are more important than distinctions and positions, and therefore in the domain of religion a hierarchical God, or a more outspoken male or female representation of God, is less acceptable than a more nondescript, individualized image of God. (Hofstede, 2002, p. 312). For Verweij, et al., a nation’s masculine/feminine scores constituted one of the most important single society characteristics explaining cross-national differences in secularization. (1997, p. 322).

**Individualism**

Individualism implies a loosely knit social framework in which people are supposed to take care of themselves and their immediate families only, while collectivism is characterized by a tight social framework in which people distinguish between in-groups and out-groups; they expect their in-group (relatives, clan, organizations) to look after them, and loyalty to it. The element of individualism with religion for this study crossed the range from low to mixed to medium high in Christianity. This is due to the different branches of Christianity – in Protestant the score would be high individualism, and Catholics would be more collective, or low in individualism.

**LIMITATIONS**

This study provided implications for OD work overseas, as OD consultants must consider religious issues in order to modify their techniques. This includes subtle issues such as deference to age when there is a religious elder in the room, or an awareness of special holy days in other
religions. As with most OD interventions, whether one is consulting globally or locally, we must be conscious to modify interventions to fit particular audiences, cultures or religious audiences.

This study is a first conceptual exploration of the fit between Organization Development and various religious philosophies and beliefs. However, due to sheer page limitations, the study did not provide further elaboration on the work of GLOBE and these findings. Further, after Hofstede identified his four cultural elements, he later identified a fifth element of which is outside the scope of this paper, but worthy of another dedicated research paper. Finally, in furthering these findings, qualitative data from members of different religions will be collected to test these early concepts.

CONCLUSION

Francesco and Gold state, “Unless globalization produces a uniform religion or other value system, there will continue to be differences in management philosophies and practices” (1998). The findings of this study support Francesco and Gold’s statement, as the findings of this study indicate that there is no one religion, or rosetta stone which can promise the success of a naïve global OD consultant.

To create more promising Global OD efforts, Cummings and Worley suggest several planned change interventions, including employee involvement, reward systems, and career planning and development, to be used to adapt to cultural diversity. Along with OD, employee involvement practices can be adapted to the needs for participation in decision making (2009). Ultimately, to be successful, Global OD practice must account for two important contingencies: alignment between the cultural values of the host country (and religion) with OD values, and the host country’s economic development. (Cummings & Worley, 2009).

Implications for Social Issues and International Management are abundant. In short, there is no one religion that fits OD, but the astute global consultant must work closely with local contacts to address unknowns and traditions which may be evident to the audience but invisible to the well-intended consultant.

Cross-cultural complexities are the elements of international and global consulting that business consultants often fear, and for this reason, one often avoids international consulting work. Similarly, with regard to cross-cultural consulting, these findings indicate that for OD consultants to be effective, they should be proactive and address cultural nuances as the best approach to overcoming these complexities.

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EVALUATING THE ROLE OF RISK IN THE DECISION TO GO PRIVATE:
A BEHAVIORAL APPROACH

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ABSTRACT

This paper utilizes behavioral decision theory to investigate why many formerly public companies have been converted to privately held corporations. Previous studies relying on an agency-theoretic prescriptive approach have identified several antecedents. As “going private” leads to a very different set of external and internal requirements, expectations, and pressures than that facing the well-studied publicly held corporate form, more study is needed to gain understanding of its antecedents and effects. Using a matched pairs sample and categorical binary regression, we further explore why managers and investors might support the decision to take a company private.

INTRODUCTION

A significant area of research in decision-making relates to how risk and uncertainty are defined, inter-relate, and affect organizational behavior. We use the definition of risk as set forth by Sitkin and Pablo (1992); it is the characteristic of decision-making that captures the degree of uncertainty regarding whether an expected, favorable outcome or an unexpected, disappointing outcome will occur. The behavioral model of decision-making identifies other factors affecting the risk of a decision such as preferences, frames, and decision context (Allen, Renn, Moffitt & Vardaman, 2007). For example, some psychologists focus on individual differences in risk-taking and observe that some people are more comfortable with risk-taking than others, while other researchers view situational factors as having a greater influence on risk taking (Das & Teng, 2001). These factors are of interest insofar as they seem to influence decision-making behavior differently, depending on the degree of risk (Sitkin & Pablo, 1992).

Shapira (1997) noted that decisions in organizations are made by either individuals or groups of individuals, so that there is significant overlap between organizations and individuals in decision theory. Strategic decisions regarding organizational form are particularly critical in shaping organizational performance. Among the many decisions a firm can make, changing from one whose equity is traded on public markets or publicly owned to one that is privately held is a critically important strategic decision with far-reaching consequences. The governance structure of the company will be transformed to a configuration in which management and ownership interests are less differentiated (Cummings, Siegel & Wright, 2007). The lack of access to equity markets results in decreased liquidity for the privately held corporation, and financing for future projects or expansion must generally come through borrowing. Given the weight of this decision, a stream of research has developed, seeking to explain the significant increase in the number of public-to-private or PTP transactions during the 1980s and again from the period between 1998 and 2007, relying primarily on agency theory (e.g., Gleason, Payne & Wiggenhorn, 2007; Opler & Titman, 1993, Weir, Laing & Wright, 2005).
While agency theory makes normative assumptions regarding a decision-maker’s choice of behavior, based on rational expectations and utility maximization, decision theory takes into account the role of risk perceptions and preferences, the latter depending on how a decision is framed, previous gains or losses, and individual risk-taking tendencies (Mukherji & Wright, 2002). We posit that the decision to convert from public to private ownership in an inherently risky one due primarily to the uncertainties surrounding future prospects. Utilizing the behavioral model of decision-making, which includes prospect theory, endowment effects, and risk propensity, we develop a framework regarding the effects of risk perception of the key stakeholders involved in a firm’s decision to go private.

Our study contributes to the existing literature by extending the research of behavioral theorists to the restructuring strategy of adopting a private as opposed to public ownership structure. The paper first reviews the decision theory literature. It then develops and tests several hypotheses employing decision theory concepts through the lens of the main players in the process of potentially going private. Results and future research implications are discussed.

THE EFFECTS OF RISK IN DECISION THEORY

Decision making has been a focus of organizational theory for over fifty years, reflected early in the Carnegie School studies (Cyert & March, 1963; March & Simon, 1958). A number of descriptive models have been developed to explain the decision-making process including power and politics (Pfeffer & Salancik, 1978), sense making (Weick, 1994), and escalation of commitment (Staw, 1981). We suggest that the uncertainty present in the PTP decision process creates a perception of risk and evokes the process of framing the perceived risk, which must be considered in analyzing the antecedents of going private. Following are highlights of the key contributions regarding the relationship between risk and decision making.

Risk Perception

Traditional decision theory defines risk as a reflection of the variation in the distribution of possible outcomes, their likelihoods, and their relative values (March & Shapira, 1987). The extent to which there is uncertainty about whether an undesirable outcome may result and the significance of such result will make a decision more or less risky (Sitkin & Pablo, 1992). Most of the early literature on managerial risk assumed that individuals are risk averse and that risk-taking propensity is a relatively stable attribute (Das & Teng, 2004). Using the framing of agency theory, managers (agents) are generally presumed to be risk averse and tend to favor less risky strategies over innovative ones. As a result, managers whose livelihood and future wealth are tied to the firm will act to preserve their own self-interests, even if contrary to the profit-maximizing interests of the principal owners (Baysinger, Kosnik & Turk, 1991; Hoskisson, Hitt & Hill, 1991). Behavioral theorists challenge agency theory’s rigid assumption of agents’ risk preferences and adapt a contingency-based view that allows for varied risk preferences (Wiseman & Gomez-Mejia, 1998). Risk perception is an important influence on a decision-maker’s assessment of risk and often varies, depending on whether the decision is framed in positive or negative terms and the value owners place on their property.
Prospect Theory. Developed by Kahneman and Tversky (1979), prospect theory states that individuals are both risk averse and risk seeking, and their decisions will differ depending on how the decision-makers frame alternatives. Individuals tend to become more risk averse if an alternative is framed in a positive light, indicating commitment to the alternative, and more risk seeking if an alternative is framed negatively (Tversky & Kahneman, 1981). Potential losses shift a decision-maker’s attention to more risky and novel solutions, rather than well-established routines and procedures (George, Chattopadhyay, Sitkin & Barden, 2006). Further, decision-makers tend to evaluate alternatives against some reference point (Kahneman & Tversky, 1979: 277). If alternatives are above the reference point, decision-makers will exhibit risk-averse behavior, but will become increasing risk seeking as the evaluated alternatives fall below the reference point.

While prospect theory was developed regarding individual decision-making, its premises have been used in studies involving organizations, stemming from the work of Bowman (1980; 1981). Bowman had expected that risk and return would be positively correlated, but instead found a negative relationship between risk and return; he called this the “risk-return paradox” (1980; p. 24) and suggested that poorly performing firms could be expected to take more risks, thus explaining the negative relationship. Since then, several studies have examined corporate decisions through the lens of prospect theory (e.g., Fiegenbaum, 1990; Fiegenbaum & Thomas, 1988; Jegers, 1991; Singh, 1986; Sinha, 1994). These findings confirmed the predictions of prospect theory that firms are more risk tolerant when either facing losses or when performance falls below a targeted level. The negative influence of performance on risk-taking supports the conjecture that losses drive behavior toward being more risk-seeking, but this does not predict improved performance (Bromily, 1991). That being said, if riskiness lowers future performance, the model envisages a “vicious circle” in which performance might only get worse (1991: 54). Other research indicates two reference points, a target or goal level and a survival level (March & Shapira, 1987), and suggests that managers will prefer less risky alternatives (i.e., will be more risk averse) when organizational survival is threatened (Shimizu, 2007).

The Endowment Effect. According to the endowment effect, the value that a person place on an object increases after the person takes possession of the object. Jervis (2004) theorized that people identify with their possessions and therefore value an object more once they own it. In the case of a certain gain, a person would be loss averse – i.e., would not want to risk losing such gain – because of the value attached to that gain. Thus, individuals would rather make a safe decision and give up the potential for additional gain than risk losing what they already possess (George, et al., 2006). In the case of losses, however, no such value exists, so the tendency for risk aversion diminishes. An inference that results from the endowment effect is that decision-makers view opportunity costs related to threats differently than "out-of-pocket" costs: “Foregone gains are less painful than perceived losses” (Kahneman, Knetsch & Thaler: 203). Samuelson and Zeckhauser (1988) noted the existence of a status quo bias, because the disadvantages of change appear greater than its advantages (Kahneman, Knetsch & Thaler, 1991).

Risk Propensity
Risk propensity is defined as an individual’s inclination to take or avoid risks (Sitkin & Pablo, 1992). Individuals with high risk propensity are comfortable with making decisions under high uncertainty. Early research suggested that a person’s training and experience played a larger role in risk taking than did personal characteristics (Slovak, 1972). More research however, challenges these findings. For example, Latham and Braun (2009) found that managers’ personal risk profiles affected the extent to which innovation is used to counter firm decline.

Other factors that may negate the risk propensity of individuals include age and tenure. Hambrick and Mason (1984) suggested that older executives may be more conservative than their younger counterparts, as they are likely to have less stamina, tend to have a greater psychological commitment to their organizations and prefer the status quo, and are more concerned with security and thus more likely to avoid risks. Consistent with these conjectures, studies found that older managers were less willing to take risks than younger managers (MacCrimmon & Wehrig, 1990) and more conservative in their risk assessments (Norton & Moore, 2006). Tenure is also thought to have an influence on organizational outcomes. In their seminal work on CEO tenure, Hambrick and Fukutomi (1991) note that continuing tenure has negative effects which impede decision-making and results in fewer substantive initiatives. Longer-tenured executives are expected to exhibit less risk propensity in their behavior.

THE POTENTIAL RISKS OF GOING PRIVATE: RISK FRAMING AND RISK PROPENSITY

The decision to go private arguably involves a high degree of risk for several reasons. Birdthistle and Henderson (2009) commented that going private deals are inherently risky because the conflicts of interests that exist among investors, managers, and fund advisors create a great deal of uncertainty among the participants in the process. There are two ways that are used to transform a public company to a private entity. One possibility involves a negotiated merger between the company and the acquisition group. If the acquisition group includes corporate officers or directors, the company will need to form a special committee of independent directors to negotiate the transaction in order to protect the interests of minority shareholders (Cannon 2003). In the case of a merger a risk exists that, notwithstanding good faith negotiations, the special committee will reject the proposed transaction or extract a higher price for the shares (McGuinness & Rehbock, 2005).

An alternative to a merger transaction involves a tender offer in which the acquisition group makes a direct offer to the public shareholders to acquire their shares. As a practical matter, this may be difficult, especially in the case of a widely held public company with a large number of individual shareholders (Canon, 2003). Thus, from the perspective of the acquisition group, which often includes management, a risk exists that an insufficient number of shareholders will accept the offer.

Even if there are sufficient votes to effectuate the transaction, private ownership itself involves risks. Public companies are often taken private specifically for the purpose of allowing companies to take adopt a high risk strategy with the hopes of a high return several years into the future (Davis, 2009). In addition, as equity ownership becomes more concentrated, as it is in privately held companies, it is typical for companies to rely on debt rather than equity financing,
creating a higher debt-to-equity ratio. To the extent private firms are highly leveraged, they will have greater incentives to make riskier decisions with the possibility of high payoffs (Greenfield, 2008). In addition, increased borrowing increases the risk of insolvency if the business is not successful (Davis, 2009). Thus, despite reports of extremely large profits made by private equity firms, 40% of private equity deals fail to even cover acquisition costs (Kelly 2007). Their highly leveraged capital structure means that PTP firms tend to have a fragile financial structure (Weitzer & Darroch 2008) at heightened risk of bankruptcy (Guo, Hotchkiss & Song, 2008).

The illiquid nature of the private firm also contributes to overall risk as it becomes difficult to assess the potential risks and rewards. Illiquidity restricts ownership transfer such that the investment is attractive only to investors with sufficiently long time horizons. In addition, the timing of future cash flows is unknown (Phalippou & Gottschalg, 2009). Consequently, whether to engage in a PTP transaction will depend on both the risk perception and individual propensities of the parties involved in the transaction.

Risk Framing: Owners

Poor organization performance increases risk-taking (Bromiley, 1991). When a decision involves risk, personal risk to the owners should be taken into account. Thus, organizational performance for purposes of determining its impact on the owners’ perception of risk, is best measured for investors by share value (Hoskisson, Hitt, Johnson, & Moesel, 1993). Poor performance results in negatively framed decisions (Sanders, 2001). Thus, prospect theory predicts that if stock prices decline below a target or threshold level, investors will be risk seeking and will favor the private status option if they intend to remain invested in the company.

Most researchers studying the PTP phenomenon note that concentration of a firm’s ownership is favorably related to its likelihood of going private because the controlling shareholders are likely to be part of the acquisition group, reducing the percentage of non-participating shareholders who must be bought out (Koenig, 2004). In addition, public companies in which venture capitalists are heavily invested may also be likely PTP candidates; as long as the price offered to non-participating venture capitalist-owners is deemed sufficient, they will likely be willing to sell their shares. Thus, investors with significant stakes in the company will tend to favor the decision to go private, even though the decision inherently involves a high degree of risk, because they can retain ownership in the business and stand to benefit from its conversion to private status by realizing gains from increases in share price.

Hypothesis 1: There will be a positive relationship between a decline in share price and a company’s going private; this relationship will be exacerbated when ownership concentration is high.

Managerial shareholdings are viewed as an influential dynamic in corporate decision-making. As insider shareholdings become concentrated, the insiders become entrenched, for their ownership stakes provide them with significant power to guarantee their own employment. Endowment theory suggests that individuals value their possessions and become loss averse. As their personal wealth becomes increasingly dependent on their equity in the company, managers’ portfolios are less diversified, and
loss minimization rather than wealth maximization is of paramount concern (Latham & Braun, 2009; Wiseman & Gomez-Mejia, 1998). Sanders (2001) found that when executives owned large amounts of company stock, they were less likely to engage in risky activities such as acquisitions or divestitures. Sanders reasoned that because executives had something of value to lose, namely their investment in the company, they would be more risk averse, as had been suggested by Kahneman and Tversky (1979). Consequently, Latham and Braun (2009) found that when faced with organizational decline, managers with greater stock ownership bore a greater residual risk than other managers and therefore engaged in less risky business investments in order to safeguard their personal investments.

While outside board members are not faced with the same diversification and threat issues as do managers, they nevertheless place value on their outstanding shares. Thus, the endowment effect would also suggest that when the board’s ownership stakes in the company are high, directors become more risk averse.

**Hypothesis 2a: There will be a negative relationship between the level of executive and board ownership and a company’s going private.**

When change to private ownership is through a management buyout, high ownership stakes by management will facilitate the transaction (Maupin, 1987). We propose that if a manager’s personal wealth is largely dependent on the firm’s value, the effect of a decline in its share value to below his/her reference point will greatly affect the manager’s overall personal wealth. In such circumstances, prospect theory holds that the manager will be more willing, rather than less willing, to take the company private even if the transaction is not management-initiated. In other words, managers faced with a certain loss of wealth will become risk seeking and will opt for an increase in variation, with the hopes that private status will reverse declines. The research of March and Shapira (1987: 1409) confirms that managers tend to take more risks in “bad situations”. We therefore put forth an alternative hypothesis, that when share prices have declined, even executives and board members who have large stakes in their firms will support going private.

**Hypothesis 2b: A decline in share price will moderate the relationship between the level of executive ownership and the firm’s going private; in such cases, it will be more likely that the firm will go private.**

The impact of declining share prices on the decision to go private as discussed in Hypothesis 2b may also be observed when managers have been granted a substantial amount of stock options. At the outset, we note that the risk-reward characteristics between outright stock ownership and stock option pay are fundamentally different and thus will impact decision-making differently (Sanders, 2001). Here, we argue that the threshold level of organizational performance is the exercise price of the option. If the market value of the stock is below the exercise price of the option, there is no current, perceived value of the stock option (the option is said to be under water). In such cases, there is no downside loss to making a risky decision, and prospect theory predicts more risk taking. Thus, Wiseman and Gomez-Mejia (1998) surmise that managers are less risk averse if their stock options are under water.

**Hypothesis 3a: As a firm’s share price declines below the exercise price, there will be a greater likelihood of a company’s going private.**
Once options are perceived to have value and are exercisable, endowment theory suggests that managers will include them as part of their wealth and will exhibit risk averse choices in an effort to preserve this wealth. Positively valued stock options create risk bearing because executives expect to realize gains in the future when the options are exercised (Wiseman & Gomez-Mejia 1998, p. 141).

**Hypothesis 3b:** There will be a negative relationship between the value of executive ownership in exercisable stock options and a company’s going private.

In the case of unexercisable options, unlike stock ownership where downside risk may lead managers to be more risk averse, there is no actual loss to managers who hold unexercisable stock options. Moreover, if the value of such options is low, there is an opportunity for executives to benefit from potential gains from a risky decision; they have nothing to lose and everything to gain from making such a decision. Thus, Sanders (2001) found a positive association between CEO stock option pay and firm acquisition activity.

**Hypothesis 3c:** There will be a positive relationship between the value of executive ownership in unexercisable stock options, when their value is low, and a company’s going private.

**Risk Propensity: Managers**

The framing of decisional alternatives is also affected by individuals’ opinions of their ability to control the outcomes of their decisions. Some risk takers believe that past successes in risky situations are a result of their skills and abilities and will be more likely to make risky decisions in the future (March & Shapira, 1992). While risk propensity is thought to be a relatively stable personal trait (Das & Teng, 2001) we will argue that it does change over time.

The risk propensity of executives is particularly influential on the degree of risk taken by the firm in its strategic decisions (Saini & Martin, 2009). Longer tenure brings with it risk aversion (Staw & Ross, 1978) and inhibition to creative thinking (Fondas & Wiersema, 1997). In addition, since CEO tenure is generally positively associated with CEO age (Wiersema & Bantel, 1992), as CEOs approach retirement, they tend to become more conservative (Finkelstein & Hambrick, 1990). Conversely, executives with shorter tenures are expected to take more risks and make changes that diverge from previous strategies (Sanders, 2001). Kor (2006) in her analysis of the effects on tenure on R&D strategy notes that longer tenure is associated with an increasing belief in one’s own views of the world, coupled with a decrease in task knowledge and information acquisition. This results in a passive decision-making approach and resistance to change in the firm’s strategy. Newcomers, on the other hand, are apt to be advocates of change because they need to prove themselves to both internal and external stakeholders. Younger managers (Bantel & Jackson, 1989; Hambrick & Mason, 1984) and managers relatively new to the firm or to their position (Hambrick & Mason, 1984; Huber, Sutcliffe, Miller & Glick, 1993) are less wedded to the status quo and are more innovative; if anything, they would prefer change as a way of possibly leaving a legacy on the company’s history.
Hypothesis 4: The decision to convert from publicly owned to private status will be moderated by the age, and tenure of the firm’s top management team; tenure and age will negatively moderate the decision to go private.

METHODS
Sample Selection

The dependent variable in our study is whether or not a public firm went private. We used a matched-pair sample design that involves choice-based sampling, appropriate when random sampling would yield a small number of suitable cases (Amemiya, 1985). Matched-pair sample design has been used in a number of management studies regarding relatively rare events, including whether firms misreported financial results (O’Connor, Priem, Coombs & Gilley, 2006), engaged in earnings management (Kury, 2010), divested formerly acquired units (Shimizu, 2007), or turned around from a state of decline (Mueller & Barker, 1997). It has also been used in several studies of going private, which focused on financial antecedents of the event (Gleason, Payne & Wiggenhorn, 2007; Weir, Laing & Wright, 2005).

We first identified U.S. public firms that filed SEC Schedule 13E3/A, which indicated the firm’s decision to go private, between 2003 and 2006, using the Lexis/Nexis database. This produced 2,471 filings, although many of them were identified as duplicates for the same company because of refilings for amendments or addendums to the schedule. From that data base we selected a random sample of 150 firms and insured that the filing was in fact the original filing for the subject firm. We then attempted to match each of these firms (the test group) by four-digit SIC code with a U.S. public firm that did not make such an filing and that we verified remained public through 2009 (the control group). In some cases an appropriate match was not available, and in other cases the independent variables were not fully available for a test firm or a control firm. Our final sample of 100 matched pairs falls within the range of sample size of existing matched-pair studies (e.g., O’Connor, et al., (2006) = 65; Weir, Laing & Wright (2005) = 95; Gleason, Payne & Wiggenhorn (2007) = 215).

Independent and Control Variables

All independent and control variables were collected through secondary resources, specifically the proxy materials filed with the SEC and Compustat. We collected data for each test firm and its matched control firm for three years; the year immediately preceding the year in which Form 13E-3/A was filed, and the two previous years.

Independent Variables. Share price change was calculated as the difference in price at the close of the year immediately preceding the year in which Form 13E-3/A was filed and the price at the close two years prior. Ownership concentration was determined as of the close of the year immediately preceding the year in which Form 13E-3/A was filed; it is the percentage of ownership reported by the CEO, executives, board members, and other shareholders owning five percent or more of the corporation’s shares. Similarly the value of the shares owned by the CEO, the board, in the aggregate, and the non-CEO executives, in the aggregate, as well as the number and value of the CEO’s and executives’ exercisable and unexercisable options, were determined
from the proxies covering the year immediately preceding the year in which Form 13E-3/A was filed. CEO tenure and age, as well as the related average age of the executives, were determined from the proxy covering the year immediately preceding the year in which Form 13E-3/A was filed. Interaction variables were developed by first mean centering the predictor variables and then calculating the product terms (Jaccard, 2001).

**Control Variables.** Previous research on the decision to go private found that firm size and market capitalization were negatively related to going private (Bharath & Dittmar, 2010; Gleason, Payne & Wiggenhorn, 2007; Renneboog, Simons & Wright, 2007); accordingly we include market capitalization and firm size (log of assets) as control variables. Firm performance has also been cited as a reason to take a corporation private (Gleason, Payne & Wiggenhorn, 2007), and is often used as a control in governance studies (e.g., Berger, Ofek & Yermak, 1997); here we used return on assets. Other control variables we employed that are commonly used in the governance literature include the percentage of outsiders on the board (Baysinger & Hoskisson, 1990; Mace, 1986; Zajac & Westphal, 1994), and percentage of ownership held by institutional investors; both are proxies for shareholder monitoring of corporate management (Davis, 1991; Johnson & Greening, 1999; Rediker & Seth, 1995).

**DATA ANALYSIS AND RESULTS**

As our dependent variable is binary, our hypotheses were tested using conditional stepwise binary logistic regression (Field, 2009). This method is appropriate for estimating models with matched pairs designs (O’Conner, et al., 2006), and provides us with key statistics including the Hosmer and Lemeshow, Wald, and exp(B) statistics. Means, standard deviations, and correlation coefficients are reported in Table 1.

The first regression model tested the effects of ownership concentration and price change. The model’s Hosmer and Lemeshow statistic was .118, above the threshold of .05, indicating an overall good fit in binary regression (Field, 2009). The model correctly predicted 82.0 percent of the cases overall. This is a significant improvement from the classification percentage that results (50%) when no predictor variables are included in the model (Pallant, 2010).

Of the control variables, market capitalization and institutional ownership percentage were negative and significant, as predicted, which suggests that firms with decreased market value and little institutional investment are more likely to go private than their counterparts. The measure for size (log of assets) was significant but was positive, rather than negative, despite evidence that the attraction of going private, including lower compliance and related costs, is more pronounced for small companies (GAO, 2006; Hartmann, 2007). This result is likely due to the high correlation between log of assets and market capitalization (.864), the latter of which had a negative relationship with going private. The remaining two control variables, ROA for performance and the percentage of outsiders on the board, were not significant.

Ownership concentration was significantly positive at p<.001 and the Exp (B) ratio before the interaction term was entered into the model revealed that an increase of ownership concentration substantially increases its odds that a company will go private. The percentage
change in share price was not significant. Next, an interaction term was added to test whether the combined effect of share price decline and ownership concentration would increase the probability of going private, as stated in Hypothesis 1. In analyzing the results, the Exp(B) statistic must be examined. In this model, as reported in Table 2 the Exp(B) for ownership
Table 1: Means, Standard Deviations and Spearman’s Correlations

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<td>1. Went Private</td>
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<td>2. Log Market Capitalization</td>
<td>2.421</td>
<td>1.058</td>
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<td>3. Log Assets</td>
<td>2.308</td>
<td>1.809</td>
<td>-.436**</td>
<td>.864**</td>
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<td>4. ROA</td>
<td>1.185</td>
<td>1.137</td>
<td>.068</td>
<td>-.163</td>
<td>-.207**</td>
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<td>5 Outside Board %</td>
<td>.723</td>
<td>.152</td>
<td>-.076</td>
<td>.259**</td>
<td>.217**</td>
<td>-0.023</td>
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<td>6. Inst Owner %</td>
<td>.091</td>
<td>.136</td>
<td>-.287**</td>
<td>.351**</td>
<td>.343**</td>
<td>-.063</td>
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<td>7. Change in Price</td>
<td>.289</td>
<td>1.119</td>
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<td>.006</td>
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<td>-.081</td>
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<td>8. Owner Concentration</td>
<td>.446</td>
<td>.411</td>
<td>-.503**</td>
<td>-.458**</td>
<td>-.420**</td>
<td>.154</td>
<td>-.158*</td>
<td>.003</td>
<td>-.028</td>
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<td>9. CEO Share Value</td>
<td>6.642</td>
<td>1.359</td>
<td>-.374**</td>
<td>-.733**</td>
<td>.607**</td>
<td>-.073</td>
<td>.106</td>
<td>.297**</td>
<td>.002</td>
<td>-.149*</td>
<td>1.000</td>
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<td>10. Board Share Value</td>
<td>6.875</td>
<td>1.127</td>
<td>-.447**</td>
<td>-.763**</td>
<td>.647**</td>
<td>.096</td>
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<td>.231**</td>
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<td>-.232**</td>
<td>.578**</td>
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<td>11. Executive Share Value</td>
<td>5.603</td>
<td>2.473</td>
<td>-.418**</td>
<td>.733**</td>
<td>.637**</td>
<td>-.084</td>
<td>.311**</td>
<td>.292**</td>
<td>.074</td>
<td>-.312**</td>
<td>.622**</td>
<td>.513**</td>
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<td>12. CEO Tenure</td>
<td>7.785</td>
<td>7.810</td>
<td>.080</td>
<td>-.097</td>
<td>-.108</td>
<td>-.013</td>
<td>-.070</td>
<td>.030</td>
<td>-.067</td>
<td>.104</td>
<td>.176*</td>
<td>-.065</td>
<td>-.105</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. CEO Age</td>
<td>54.290</td>
<td>9.906</td>
<td>-.155</td>
<td>.085</td>
<td>.147</td>
<td>.075</td>
<td>-.041</td>
<td>.040</td>
<td>.043</td>
<td>-.096</td>
<td>.146*</td>
<td>0.053</td>
<td>0.021</td>
<td>.251**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>14. Executive Age</td>
<td>50.391</td>
<td>4.789</td>
<td>-.016</td>
<td>.011</td>
<td>.069</td>
<td>.020</td>
<td>-.083</td>
<td>.036</td>
<td>-.014</td>
<td>.031</td>
<td>.058</td>
<td>.055</td>
<td>-.034</td>
<td>.122</td>
<td>.393**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
concentration was 690.705 and the Exp(B) for stock price change was .683, although still not significant. Thus, holding price constant, the predicted outcome of going private increases substantially with an increase in share concentration (Jaccard, 2001). However, the product term was not significant as its confidence interval contained the value 1.0, indicating that the combined effect of price change and ownership concentration does not affect the decision to go private. Therefore there is no support for Hypothesis 1, although its moderating variable of ownership concentration was positively related to going private.

Next, we tested the effect of share ownership by the CEO, the board, and senior executives on the decision to go private. Share ownership was measured by the value of the shares owned by the CEO and collectively by the board and the executives. The mean value of shares owned by the CEO was $51,287,303, collectively by the board, $68,656,488, and by all the executives as reported in the proxy, $16,240,704. The model’s Hosmer and Lemeshow Test showed significance of .380, and the model accurately predicted 82.0 percent of the cases. The coefficients for all three ownership variables were negative, and were significant for CEO and board ownership, indicating that the higher the value of the shares owned by the CEO and the board, the less likely the firm will go private. Thus, Hypothesis 2a is supported with respect to shares owned by the CEO and board members but is not supported regarding senior executives. We then added a product variable to test for an interaction effect between the change in share price and CEO, board, and executive ownership. As seen in Table 2, adding the interaction variables did not affect either the sign or the significance of the predictors. Further, the confidence interval for the Exp(B) of the interaction term contained the value of 1.0, indicating that the interaction effect is not significant (Jaccard, 2001). Thus, the endowment effect (Hypothesis 2a) holds even when share price is declining, so that Hypothesis 2b is not supported. Table 2 summarizes the results from these two analyses.

A second regression was estimated using a subset of the sample to include only those firms which use stock options in their CEO or executive pay packages, thereby reducing the number of observations to 156 matched pairs. The model’s Hosmer and Lemeshow statistic was .526, and the model correctly predicted 86.7 percent of the cases. We estimated the effect of the CEOs’ and executives’ options being under water, which was measured by a dichotomous variable equal to 1 if under water, else 0. As seen from Table 3, the effect was not significant, so that Hypothesis 3a is not supported. When the value of both the CEOs’ and executives’ exercisable and unexercisable options were added to the model, the coefficient for CEO exercisable options was positive and significant, contrary to the results predicted by Hypothesis 3b. None of the other predictor variables were significant in the model.

A final regression estimated the effect of CEO tenure and age and the average age of non-CEO executives as moderating variables on the decision to go private to test Hypothesis 4s. All
were expected to be negative. While the model’s Hosmer and Lemeshow Test showed significance of .168 and the model accurately predicted 83.5 percent of the cases, CEO tenure, CEO age, and average executives’ age proved not to be significant in the model.

Table 2: Logistic Regressions Predicting the Effects of Change in Share Price, Ownership Concentration and CEO, Board, and Executive Ownership on the Decision to Go Private

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Market Cap</td>
<td>-.881</td>
<td>.206</td>
<td>18.244</td>
<td>1</td>
<td>.000</td>
<td>.414</td>
<td>.276</td>
<td>.621</td>
<td></td>
</tr>
<tr>
<td>Log Assets</td>
<td>1.128</td>
<td>.403</td>
<td>7.853</td>
<td>1</td>
<td>.005</td>
<td>3.090</td>
<td>1.404</td>
<td>6.802</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-.096</td>
<td>.182</td>
<td>.278</td>
<td>1</td>
<td>.598</td>
<td>.909</td>
<td>.637</td>
<td>1.297</td>
<td></td>
</tr>
<tr>
<td>Outside Board %</td>
<td>2.914</td>
<td>1.617</td>
<td>3.247</td>
<td>1</td>
<td>.072</td>
<td>18.428</td>
<td>.774</td>
<td>438.49</td>
<td></td>
</tr>
<tr>
<td>Inst Owner %</td>
<td>-6.850</td>
<td>1.906</td>
<td>12.914</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.044</td>
<td></td>
</tr>
<tr>
<td>Change in Price</td>
<td>-.382</td>
<td>.214</td>
<td>3.187</td>
<td>1</td>
<td>.074</td>
<td>.683</td>
<td>.449</td>
<td>1.038</td>
<td></td>
</tr>
<tr>
<td>Ownership Concentration</td>
<td>6.538</td>
<td>1.251</td>
<td>27.318</td>
<td>1</td>
<td>.000</td>
<td>690.705</td>
<td>59.509</td>
<td>8016.763</td>
<td></td>
</tr>
<tr>
<td>CEO Share Value</td>
<td>-.375</td>
<td>.182</td>
<td>4.258</td>
<td>1</td>
<td>.039</td>
<td>.687</td>
<td>.481</td>
<td>.981</td>
<td></td>
</tr>
<tr>
<td>Board Share Value</td>
<td>-.062</td>
<td>.384</td>
<td>7.668</td>
<td>1</td>
<td>.006</td>
<td>.346</td>
<td>.163</td>
<td>.733</td>
<td></td>
</tr>
<tr>
<td>Executive Share Value</td>
<td>-.184</td>
<td>.110</td>
<td>2.791</td>
<td>1</td>
<td>.095</td>
<td>.832</td>
<td>.670</td>
<td>1.032</td>
<td></td>
</tr>
<tr>
<td>Concentration x Sh Price</td>
<td>-.657</td>
<td>.555</td>
<td>1.401</td>
<td>1</td>
<td>.237</td>
<td>.519</td>
<td>.175</td>
<td>1.538</td>
<td></td>
</tr>
<tr>
<td>CEO Value x Sh Price</td>
<td>.049</td>
<td>.033</td>
<td>2.164</td>
<td>1</td>
<td>.141</td>
<td>1.050</td>
<td>.984</td>
<td>1.120</td>
<td></td>
</tr>
<tr>
<td>Board Value x Sh Price</td>
<td>-.104</td>
<td>.396</td>
<td>.069</td>
<td>1</td>
<td>.793</td>
<td>.901</td>
<td>.414</td>
<td>1.960</td>
<td></td>
</tr>
<tr>
<td>Exec Value x Sh Price</td>
<td>.101</td>
<td>.039</td>
<td>.072</td>
<td>1</td>
<td>.788</td>
<td>1.010</td>
<td>.936</td>
<td>1.090</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.498</td>
<td>2.456</td>
<td>5.011</td>
<td>1</td>
<td>.025</td>
<td>244.274</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=200, Chi Sq= 121.678, R Sq=.456 (Cox and Snell); .608 (Nagelkerke)-2LL=155.581
Hosmer and Lemeshow=.380, Percent Predicted=82.0
The Exp(B) statistics for the tenure and age variables were close to 1.0 (1.013, 1.033, and 1.095, respectively) indicating that the odds of a decision to go private were about the same regardless of tenure or age. The only variables that changed with the inclusion of the interaction terms were CEO and executive ownership, with CEO ownership no longer significant and executive ownership becoming significant. This suggests that the endowment effect may not be as strong for older CEOs but becomes relevant for older non-CEO executive managers.

Table 3: Logistic Regressions Predicting the Effects of Underwater Options, and Value of Exercisable and Unexercisable Options on the Decision to Go Private

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I. for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Market Cap</td>
<td>-.060</td>
<td>.501</td>
<td>4.471</td>
<td>1</td>
<td>.034</td>
<td>.347</td>
<td>.130 .925</td>
</tr>
<tr>
<td>Log Assets</td>
<td>-.027</td>
<td>.091</td>
<td>.087</td>
<td>1</td>
<td>.769</td>
<td>.974</td>
<td>.815 1.163</td>
</tr>
<tr>
<td>ROA</td>
<td>.142</td>
<td>.427</td>
<td>.111</td>
<td>1</td>
<td>.739</td>
<td>1.15</td>
<td>.499 2.661</td>
</tr>
<tr>
<td>Outside Board %</td>
<td>-.325</td>
<td>2.969</td>
<td>1.217</td>
<td>1</td>
<td>.270</td>
<td>.038</td>
<td>.000 12.728</td>
</tr>
<tr>
<td>Inst Owner %</td>
<td>-.325</td>
<td>2.969</td>
<td>1.217</td>
<td>1</td>
<td>.270</td>
<td>.038</td>
<td>.000 12.728</td>
</tr>
<tr>
<td>Underwater</td>
<td>.040</td>
<td>.474</td>
<td>.007</td>
<td>1</td>
<td>.933</td>
<td>1.041</td>
<td>.411 2.634</td>
</tr>
<tr>
<td>CEO Value Exercisable</td>
<td>.559</td>
<td>.261</td>
<td>4.582</td>
<td>1</td>
<td>.032</td>
<td>1.749</td>
<td>1.048 2.918</td>
</tr>
<tr>
<td>CEO Value Unexercisable</td>
<td>-.212</td>
<td>.227</td>
<td>.876</td>
<td>1</td>
<td>.349</td>
<td>.809</td>
<td>.518 1.262</td>
</tr>
<tr>
<td>Exec Value Exercisable</td>
<td>-.062</td>
<td>.268</td>
<td>.054</td>
<td>1</td>
<td>.816</td>
<td>.940</td>
<td>.556 1.587</td>
</tr>
<tr>
<td>Exec Value Unexercisable</td>
<td>.057</td>
<td>.293</td>
<td>.038</td>
<td>1</td>
<td>.846</td>
<td>1.059</td>
<td>.596 1.881</td>
</tr>
<tr>
<td>Constant</td>
<td>1.425</td>
<td>2.040</td>
<td>.488</td>
<td>1</td>
<td>.485</td>
<td>4.159</td>
<td></td>
</tr>
</tbody>
</table>

N=156, Chi Sq=19.192, R Sq=.192 (Cox and Snell); .358 (Nagelkerke)-2LL=51.490
Hosmer and Lemeshow=.526, Percent Predicted=86.7

DISCUSSION

In examining the decision to go from public to private status, reliance on an agency-theoretic prescriptive approach has been at the forefront of contemporary research. While we use a very different set of behavioral assumptions from agency theory, some of the predictions made using decision theory are consistent with those made using agency theory but provide further explanation of these relationships. For example, agency theory predicts that undervaluation of stock will influence the decision to go private, largely due to incentives (e.g., Maupin, Bidwell &
Ortegren, 1984). Using decision theory, Hypothesis 1 also posits that a decline in share price will be negatively related to the decision to go private, but based on the framing effects people use when evaluating alternatives. Prospect theory supports more risky decisions – in this case the decision to adopt a private form of ownership – in situations in order to recover a loss (Tversky & Kahneman, 1992). When faced with a possible loss on their investments, owners will become less risk averse and will not only acquiesce, but may drive the movement to private status as a means to reverse their losses. Our research did not confirm this hypothesis, however.

| Table 4: Logistic Regressions Predicting the Effects of Tenure and Age Interactions on Price Change, Ownership Concentration and Ownership by CEO, Board and Executives |
|------------------------------------------|--------|--------|--------|-------|--------|--------|
|                                         | B      | S.E.   | Wald   | df    | Sig.   | Exp(B) |
| Log Market Cap                          | -1.837 | .418   | 19.292 | 1     | .000   | .159   |
| ROA                                     | -0.094 | .185   | .258   | 1     | .612   | .910   |
| Outside Board %                         | 1.669  | 1.368  | 1.487  | 1     | .223   | 5.306  |
| Inst Owner %                            | -4.588 | 1.525  | 9.052  | 1     | .003   | .010   |
| Change in Price                         | -0.154 | .170   | .814   | 1     | .367   | .858   |
| Ownership Concentration                 | 4.613  | .940   | 24.063 | 1     | .000   | 100.773|
| CEO Share Value                         | -0.278 | .240   | 1.337  | 1     | .248   | .757   |
| Board Share Value                       | -0.962 | .385   | 6.251  | 1     | .012   | .382   |
| Exec Share Value                        | -0.239 | .113   | 4.473  | 1     | .034   | .787   |
| CEO Tenure                              | -0.043 | .028   | 2.294  | 1     | .130   | .958   |
| CEO Age                                 | -0.016 | .025   | .418   | 1     | .518   | .984   |
| Exec Age                                | -0.008 | .051   | .024   | 1     | .876   | .992   |
| PrChXTen                                | -0.007 | .031   | .055   | 1     | .815   | .993   |
| PrChXCEOAge                             | -0.010 | .020   | .244   | 1     | .622   | .990   |
| PrChXExecAge                            | -0.008 | .038   | .043   | 1     | .837   | .992   |
| OCXTen                                  | 0.031  | 0.128  | 0.060  | 1     | .807   | 1.032  |

95% C.I. for EXP(B)

<table>
<thead>
<tr>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>.070</td>
<td>.362</td>
</tr>
<tr>
<td>1.743</td>
<td>11.541</td>
</tr>
<tr>
<td>.634</td>
<td>1.308</td>
</tr>
<tr>
<td>.363</td>
<td>77.558</td>
</tr>
<tr>
<td>.001</td>
<td>.202</td>
</tr>
<tr>
<td>.614</td>
<td>1.197</td>
</tr>
<tr>
<td>15.955</td>
<td>636.480</td>
</tr>
<tr>
<td>.473</td>
<td>1.213</td>
</tr>
<tr>
<td>.180</td>
<td>.812</td>
</tr>
<tr>
<td>.631</td>
<td>.983</td>
</tr>
<tr>
<td>.906</td>
<td>1.013</td>
</tr>
<tr>
<td>.937</td>
<td>1.033</td>
</tr>
<tr>
<td>.899</td>
<td>1.095</td>
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<td>.935</td>
<td>1.054</td>
</tr>
<tr>
<td>.953</td>
<td>1.029</td>
</tr>
<tr>
<td>.922</td>
<td>1.068</td>
</tr>
<tr>
<td>.803</td>
<td>1.326</td>
</tr>
</tbody>
</table>
One explanation for our lack of findings is that the two competing schools of thought have oppositional effects, leading to no net effect. While some managers and owners under some conditions may view the decline as a motivation to adopt private status in order to recoup losses, per prospect theory, executives and owners of other firms might become more conservative in the face of financial downturn and are less innovative in their strategic response, per the threat-rigidity thesis. As a result, a decrease in share price does affects firms, but in different ways, and there is no aggregate effect across the firms.

In addition, agency theory predicts a positive relationship between ownership concentration and going private, because the concentration of ownership among a few investors diminishes the benefits of disperse ownership generally associated with being public (Bharath and Dittmar 2010). Our results demonstrate that decision theory also largely supports the positive relationship between ownership concentration and the decision to go private. Ownership concentration was significant across all four models, confirming the considerable influence asserted by shareholders with significant holdings in corporate decision-making.

Hypothesis 2 tested the endowment effect, proposing that the extent of CEOs’, directors’, and managers’ equity holdings provide a frame of reference that affects their support or disagreement with the transaction. While an endowment effect was seen with respect to shareholdings by the CEO and the board, it was not observed for non-CEO executives. One reason could be simply that the CEO and the board are more powerful actors in organizations and have more influence in major strategic decisions than other executives.

Decision theory, like agency theory, sometimes predicts a changed relationship due to the presence of a moderating variable, and sometimes leads to competing hypotheses. For example, a key concept of agency theory is that while managers are normally interested in pursuing short-term performance, their interests become more aligned with those of the shareholders when they own a substantial portion of the firm’s equity (Jensen & Meckling, 1976), and they become more likely to make decisions to maximize long-term shareholder wealth. However, agency theory
also acknowledges that although shareholders prefer growth-oriented risk taking, insiders with undiversified holdings in company stock will attempt to reduce their risk and opt for non-value maximizing projects (Wright, Ferris, Sarin & Awasthi, 1996). In addition, the relationship between ownership and risk is not linear. When executives have a low level of equity ownership, their stockholdings encourage risk taking, but as ownership grows, their risk taking is reduced (Wright, et al., 1996). In our study, CEO and board ownership was significantly greater than non-CEO ownership, suggesting that the endowment effect is more pronounced when shareholdings are substantial. From a financial perspective, the more stock owned by interested parties, the greater the effect of a potential decline in share price on the owners’ personal wealth and, therefore, the greater the owner’s sensitivity to risk (Latham & Braun, 2009).

Our predictions regarding the impact of executive stock option ownership did not develop. To the contrary, the value of CEO exercisable options was positively related to the decision to go private, suggesting that a difference does exist in how executives value stock ownership and stock options. As suggested by Sanders (2001: 479) the risk and reward characteristics of outright stock ownership are “fundamentally different” than those of stock options and thus will have “distinct effects” on decision-making. Option ownership presents an opportunity for executives to benefit from increases in stock price that might occur if the company realizes significant gains from decisions that entail a fair degree of risk. At the same time, the executive bears no downside risk if the decision results in a failure so there is little distinctive from making risky decisions, even though gains are not assured. Our results support this theory and the use of stock grants, rather than stock options, as a component of executive compensation. Restricted stock grants bring upside and downside risk to executives, akin to the conditions faced by shareholders. Consequently, restricted stock grants encourage executives to engage in corporate strategies that are more risk averse relative to the strategies encouraged by stock options (Bryan, Hwang & Lillien, 2000).

Not included in most agency-based studies but included in our hypotheses is the effect of managers’ risk propensity on the decision to go private. Decision theory should add to our understanding of the antecedents of going private by taking into account individual characteristics, including risk preferences (Sitkin & Pablo, 1992), as managers’ prior experience and individual traits will play a part in the ultimate decision. Our hypothesis that age and tenure would decrease the risk propensity of CEO and executives was not supported. Similarly, Sanders (2001) found that acquisition and divestiture activity did not vary much between long- and short-tenured CEOs. While there is support for the belief that these demographic factors should contribute to an individual’s risk-seeking tendency, we also acknowledge that demographic variables are often poor substitutes for the underlying values that shape decision-making (Priem, Lyon & Dess, 1999). Thus, risk propensity might be better measured with a survey instrument such as the one used by Brockman and her colleagues (Brockman, Becherer & Finch, 2006).

CONCLUSION
Empirical studies of the antecedents of going private across its two eras have tended to use agency theory or have been largely atheoretical, and provide some internal financial explanations. The prevalent internal financial factor in these studies is low market value, measured in various ways (e.g., Bharath & Dittmar, 2008; Gleason, Payne & Wiggenhorn, 2007; Maupin, 1987; Weir, Laing & Wright, 2005) Other financial variables have had mixed results. These include balance sheet liquidity (Bharath & Dittmar, 2008; Gleason, Payne & Wiggenhorn, 2007); financial distress (Opler & Titman, 1993; Gleason, Payne & Wiggenhorn, 2007); and free cash flow (Bharath & Dittmar, 2008; Lehn & Poulsen 1989).

Our test of behavioral decision theory confirmed that low market value, which was one of our control variables, is an antecedent of going private. Low market value appears to be a driver of going private, as it is a common finding regardless of studies’ theoretical framing. We theorized that the decision to go private involves risk, for it affects the fundamental structure of the corporation, and found that CEO and board ownership had a negative effect on going private. Our results suggest that the value of CEO and executive stock options, whether exercisable or unexercisable, had a positive effect on going private. This finding suggests that differences exist in how executives value outright stock ownership and stock options, so that the agency-theory inspired reliance on stock options as a control mechanism may in fact have a contrary effect.

Studies of organizational decision-making have focused on a number of strategic decisions such as innovation, diversification, acquisitions, and divestitures (e.g., Aggarwal & Samwick, 2003; Latham & Braun, 2009; Sanders, 2001; Shimizu, 2007). Arguably the decision to go private involves more risk as it affects the fundamental structure of the corporation. As “going private” leads to a very different set of external and internal requirements, expectations, and pressures than that facing the well-studied publicly held corporate form, more study is needed to gain understanding of its antecedents and effects.

REFERENCES


159


LYING, CHEATING & STEALING:
I’M JUST TRYING TO HELP MY ORGANIZATION!

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Mark A. Davis, University of North Texas, mark.davis@unt.edu

ABSTRACT

Traditional studies of unethical behavior in organizational settings have focused on negative or selfish motives; however, an emerging concept known as Unethical Pro-Organizational Behavior (UPB) proposes that individuals may engage in unethical behavior to help rather than hurt the organization. We build on this conceptualization by using signaling theory and selective moral disengagement to propose that external forces may further influence an employee’s decision to engage in UPBs. Specifically, we propose that unethical leadership, a leadership vacuum, unethical socialization, and lax enforcement of ethical policies send strong signals to organizational actors that may lead them to engage in UPBs.

INTRODUCTION

As the accounting scandals at the turn of the century and the financial crisis of recent years have shown, the unethical behavior of individuals and groups of individuals can have significant financial and social costs for those both within and outside the organization. Understanding unethical behavior, understanding why organizational actors engage in it and how this behavior impacts organizations and their stakeholders has received much attention in scholarly literature (Baucus & Near, 1991; Baucus & Baucus, 1997; Greve, Palmer, Pozner, 2010; Mishina, Dykes, Block, & Pollock, 2010; Tenbrunsel & Smith-Crowe, 2008; Vaughan, 1999).

Prior research has primarily focused on unethical behavior as stemming from negative motivations. For example, Robinson and Greenberg (1998) note that prior research has focused on topics such as workplace deviance (Robinson & Bennett, 1995), organizational misbehavior (Vardi & Wiener, 1996), antisocial behavior (Giacalone & Greenberg, 1997) and noncompliant behavior (Puffer, 1987) to name a few.

Alternatively, a different perspective was put forth by Umphress, Bingham, and Mitchell (2010) who asked if unethical behavior could be conducted not to benefit the specific actor or to harm the organization, but instead to help the organization. They referred to this as “unethical pro-organizational behavior (UPB)” (p.769), which they defined as unethical behavior conducted to benefit the organization. Key to this conceptualization is that the behavior not be intended to help the individual but instead to help the organization.
As Gino, Schweizer, Mead, and Ariely (2011) note, despite the substantial amount of research on unethical behavior, much still remains to be known about individuals who have good intentions but yet engage in unethical actions. Umphress, et al. (2010) found that those individuals whose concept of self was closely aligned with organizational identification and who had positive reciprocity beliefs were more likely to engage in UPBs than were others. Yet, the authors acknowledged that there was still much to be learned about the complexities of UPB and that further empirical testing was needed.

In this paper we intend to build on the work of Umphress, et al. (2010) by proposing that certain forces external to the individual may exacerbate the likelihood that an individual will engage in unethical behavior in order to help the organization. Specifically, we propose that the tone set by either unethical or disengaged leaders is quickly detected by organizational actors and influences the range of actions they may consider when attempting to accomplish organizational objectives. Additionally, all organizational actors go through some form of socialization process when they join an organization and the norms that are communicated during this process may also impact the types of actions that an actor will later consider appropriate. Last, organizational actors observe the level of enforcement (or lack of enforcement) of organizational policies and stated standards of behavior and this enforcement also sends powerful signals to the actors regarding what is considered acceptable behavior.

Based on these propositions, we believe that organizational actors who are motivated to help the organization may eventually engage in unethical behavior and then justify this behavior based on signals that they receive from other organizational actors. By conducting this research we hope to add to the body of literature on a form of unethical behavior “that is often neglected in the literature” (Umphress, et al, 2010; 769). Furthermore, by understanding the organizational forces that can lead to UPB, managers will be able to take actions to reduce the likelihood that such behaviors are considered as acceptable means to organizational ends.

**LITERATURE REVIEW**

Before discussing our model and propositions, we provide the reader with a review of two theories previously introduced in academic literature that influenced our theoretical model. These two theories are signaling theory and selective moral disengagement.

**Signaling Theory**

Spence (1973, 2002) conceived of signaling theory as a means for two parties to reduce information asymmetry between them. Stiglitz (2002: 469) succinctly described information asymmetry as occurring when “different people know different things.” As Connelly, Certo,
Ireland, and Reutzel (2011) observe in their review of signaling theory, some information is privately held while other information is publicly held and there is value in the privately held information that could aid in decision making.

When one party lacks all the information they need to make a decision they can engage in a costly search routine or they can seek to obtain this information more quickly from readily available signals. For example, if a consumer is not very knowledgeable about a product (e.g. wine) and are faced with a wide range of options and no means of assessing quality without sampling the product, they might use price as a signal of the product’s quality. In Spence’s (1973) initial conceptualization of signaling theory he observed that high-quality job applicants attempted to separate themselves from low-quality applicants by signaling to employers that they had successfully completed the rigorous requirements of higher education. As Connelly, et al., (2011) note, most signaling models are based on quality, but other related concepts such as reputation and prestige can also be observed in signaling models. These signaling models primarily consist of two parties, the signaler and the receiver, a signal, and a feedback mechanism.

Signaling theory has primarily focused on the signaler intentionally taking steps to communicate signals that are positive about imperceptible qualities of the signaler which are intended to influence the receiver (Connelly, et al., 2011). However, other scholars have also posited that signals can be unintentional and have negative consequences (Perkins & Hendry, 2005), that signals may conflict with one another (Balboa & Marti, 2007), and that signalers may unintentionally communicate negative information to the receiver (Ryan, Sacco, McFarland & Kriska, 2000).

We believe signaling theory is applicable to our discussion of UPB because organizational actors often operate in situations of information asymmetry or in situations where they receive conflicting messages from top management. In such situations, organizational actors look for signals that indicate what the accepted, normative behavior is. It is then possible that the organizational actor receives signals that encourage them to engage in UPBs and that the actor may in turn justify this behavior as helping the organization.

Selective Moral Disengagement

As we embarked on our research of UPB, we repeatedly asked ourselves how individuals could justify performing these acts, especially where there is no personal gain involved. We believe that selective moral disengagement provides a key mechanism through which individuals justify unethical behavior that benefits their organization. According to social cognitive theory (Bandura, 1986) moral reasoning translates into actions through “self-regulatory mechanisms rooted in moral standards and self-sanctions by which moral agency is exercised” (Bandura,
Sometimes people selectively disengage these self-sanctions and, therefore, justify or rationalize unethical behavior. Social cognitive theory (Bandura, 1986) asserts that self-regulatory mechanisms must be activated in order for them to influence behavior. This process is not automatic; persons can selectively activate or disengage these mechanisms. This allows a person with the same moral standards to behave differently under different circumstances.

One of the mechanisms used to selectively disengage is moral justification (Bandura, 1999; White, Bandura & Bero, 2009). Moral justification may help explain how an employee is able to justify UPB. Unethical behavior is made acceptable by portraying it as socially worthy. If an act is cognitively redefined as moral, individuals feel free to pursue the act free of self-censure. For example, an employee at a county hospital may be able to justify his role in billing unjustified expenses to Medicare because the hospital needs those funds to survive and continue treating patients who have nowhere else to go for treatment. In this example, the employee has justified his UPB on the grounds that helping the county hospital is a socially worth cause.

Another mechanism for selective disengagement when confronted with decisions in the ethical realm is dehumanization (Bandura 1999; White et al, 2009). Dehumanization may also explain how an employee is able to justify UPB. According to Bandura (1999, p. 200) “The strength of self-censure depends partly on how the perpetrators view the people they mistreat”. As it relates to UPB, an employee may help his organization at the expense of others that he has cognitively dehumanized. For example, a corporate accountant may justify financial exaggerations that help his company raise needed funds because he has never met the investors who will be harmed. Because he has never met them, the investors seem less human, self-censure is likely to be weaker and he is able to justify his UPB.

We will use the theoretical lens provided by signaling theory and selective moral disengagement to inform the following theoretical model and propositions. In this model we propose that unethical pro-organizational behavior is influenced by two broad categories of forces external to the individual, leadership and culture, and by the individual forces of organizational identification and positive reciprocity beliefs that were initially proposed by Umphress, et al, (2010). In our conceptualization of the external forces, leadership is comprised of two components, unethical leadership and a leadership vacuum, while culture is comprised of unethical socialization and lax enforcement of ethical policies. These concepts are further explained below.

Unethical Pro-organizational Behavior (UPB)

Before we introduce the propositions suggested by the model, we begin by describing unethical pro-organizational behavior (UPB). UPB is unethical behavior that seeks to benefit the organization (Umphress et al, 2010). The act must be both unethical and pro-organizational to
be considered UPB. Unethical behavior is defined as “either illegal or morally unacceptable to the larger community” (Jones, 1991, p. 367). Pro-organizational behavior is defined as behavior directed toward an organization with the intent of promoting the welfare of the organization” (Brief & Motowidlo, 1986). While some authors have discussed the possibility that employees’ unethical acts may be performed to benefit the organization (e.g. Vardi & Weitz, 2004) this is still a largely unexplored area of behavioral ethics.

We believe that there are elements external to the individual in an organizational setting that can exacerbate an employee’s desire to help their organization by engaging in an unethical act. Based on a review of the extant literature, we believe there are two main forces that lead to a greater likelihood that employees engage in UPB - leadership and culture. These two forces are further divided into two constructs each. Leadership influence is conceptualized under two dimensions – unethical leadership and a leadership vacuum. Cultural influence is also conceptualized by two dimensions - unethical socialization and lax enforcement of ethics code violations. These four constructs are the basis for each of our four propositions.

The Influence of Leadership on UPBs

Unethical Leadership. Research has shown that a leader’s ethics may significantly influence the ethical climate of an organization (Schminke, Ambrose & Neubaum, 2005). This puts leaders in the driver’s seat when it comes to developing the ethical norms of an organization. Northouse

MODEL & PROPOSITIONS

Figure 1: A Model of Unethical Pro-organizational Behavior
defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (2010, p.3). Key to this definition is the role of influence. The type of behavior influenced by the leader is what separates unethical leadership from ethical leadership. Brown & Mitchell (2010) define unethical leadership as “behaviors conducted and decisions made by organizational leaders that are illegal and/or violate moral standards, and those that impose processes and structures that promote unethical conduct by followers” (p. 588). This definition is relatively new to the leadership literature and no empirical work has been done to date. The authors concede that researchers have “only scratched the surface of identifying research questions and proposing new directions” (Brown & Mitchell, 2010, p. 604) related to unethical leadership.

Unethical leaders can encourage unethical behavior in followers without engaging in unethical acts themselves by providing rewards for unethical behavior or condoning or ignoring unethical acts (Ashforth & Anand, 2003; Brief, Buttram & Dukerich, 2001). Further, unethical leaders can encourage unethical behavior in followers by modeling it. Brown, Trevino and Harrison (2005) use social learning theory (Bandura, 1986) to explain how the ethical actions of leaders influence the behavior of followers through modeling. They propose that employees learn what is expected through role modeling and that leaders are likely to be the source of this modeling due to their assigned position of authority in the organization and the power they have to impact the behavior and outcomes of others. It stands to reason then, if the leader is unethical the same
social learning effects may occur, which results in followers modeling the unethical behaviors of the leader.

It is important to note that social learning goes beyond mimicry or imitation. With social learning theory, subjects abstract information from a role model, learn the guiding principles for the role model’s behavior and then apply those principles in future situations; creating new versions of the behavior beyond what they saw or heard from the role model (Bandura, 2005). Bandura (1986) asserts that both high standing in the “prestige hierarchy” and the ability to control rewards contribute to modeling effectiveness (p. 207). This puts leaders in the position of especially effective role models. Therefore, when those in positions of power in an organization behave unethically they are strong role models for followers, making it more likely that followers behave unethically.

The concept of employees conforming to the ethical values of their leaders is supported by research (Schminke, Wells, Peyrefitte & Sabora, 2002). Further, this effect can ‘cascade’ from higher levels of the organization to lower levels. ‘Cascading’ involves the repetition of role modeling, so that behaviors in the upper levels of the management hierarchy may impact employee behaviors at lower levels (Waldman and Yammarino, 1999). In an experimental study performed by Dukerich, Nichols, Elm & Vollrath (1990) leaders with lower levels of moral judgment were found to depress the group’s average moral reasoning. When a person with a low level of moral reasoning was assigned a leadership position in a group, the moral reasoning level of the group was lowered in subsequent decision making (conformity to the leader). Interestingly, this conformity effect happened more often when the assigned leader was less principled than it did when the leader was more principled, suggesting that unethical leadership may have a greater impact on follower behavior than ethical leadership.

Based on this literature review, it is clear that the ethical/unethical behavior of the leader is a strong predictor of follower behavior. We believe that when a leader is unethical, individuals are more likely to engage in UPB because the leader is sending a strong signal of tolerance for unethical behavior. Further, the individual may use selective moral disengagement to justify their actions. Therefore, our first proposition is:

*Proposition 1. Unethical leadership is positively related to UPB.*

**Leadership Vacuum.** In the management science literature the concept of leadership is based not on an organizational position, but on the attributes, behaviors, and characteristics of a person. Northouse defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (2010, p.3) while Yukl more broadly defines leadership as “the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared
goals (2010, p. 8). What is clear from both definitions is that leadership is not based on organizational position or role. Leadership is a separate construct that involves influencing others. We propose that when there are individuals in positions of authority who do not provide leadership, there becomes a ‘leadership vacuum’.

The absence of a leader, despite individuals holding supervisory roles assigned by the organization, leads to employee confusion as to what the organization's goals are and how to achieve them. We propose that when a leadership vacuum exists, employees look to other organizational members to determine what appropriate behaviors are. When a leadership vacuum exists, employees look for other signals to guide their behavior and as a result may rely more heavily on coworkers to learn behavioral norms because there is no leader to look to. Consequently, the guidance provided by coworkers may not align with the official position of the organization. When employees observe coworkers performing UPB, the new employee may believe that performing UPBs is the accepted norm in that organization.

We also believe that when a leadership vacuum exists there is a greater likelihood that individuals will engage in UPBs. The leadership vacuum forces individuals to seek other organizational actors to signal appropriate behavior. If those actors are engaging in UPBs, it makes it more likely that an individual would receive that signal and assume UPBs are the norm in the organization. An employee may justify this behavior in many ways, including two of the mechanisms of selective moral disengagement referred to earlier – moral justification and dehumanization. Therefore, our second proposition is:

Proposition 2. The existence of a leadership vacuum is positively related to UPB.

The Influence of Organizational Culture / Environment on UPBs

Unethical Socialization. Socialization is “the process by which an individual comes to appreciate the values, abilities, expected behaviors and social knowledge essential for assuming an organizational role and for participating as an organizational member” (Louis, 1980 p. 229-230). The outcome of organizational socialization is a ‘perspective’ for interpreting experiences in the work place. Once developed, this perspective provides “the ground rules under which everyday conduct is to be managed” (Van Maanen & Schein, 1979, p. 212). Socialization content may be categorized as role-related learning or cultural learning. “Culture conveys important assumptions and norms governing membership, values, activities and aims. The norms and assumptions are collectively shared and interactively emergent; they are enacted rather than spoken” (Louis, 1980, p. 232). Once socialized, an employee becomes an insider.

Becoming an insider grants the employee inclusionary rights which permit them to “1) share organizational secrets, 2) to separate the *presentational* rhetoric used on outsiders to speak of
what goes on in the setting from the operational rhetoric used by insiders to understand the unofficial yet recognized norms associated with the actual work going on and the moral conduct expected of people in the particular organizational segment” (Van Maanen & Schein, 1979, p. 222). When the socialization process conveys unethical values, those values become part of the employee’s perspective for interpreting their work experiences. This perspective provides employees the means to justify UPB. Further, once the person becomes an insider, they protect organizational secrets, such as UPB performed by others in the organization. While these behaviors may be spoken about inside the organization, a very different rhetoric may be conveyed to outsiders.

It is important to note that socialization is not restricted to formal or official acculturation. “Colleagues, superiors, subordinates, clients, and other associates support and guide the individual in learning the new role” (Van Maanen & Schein, 1979, p. 215). Research has shown that unethical behavior learned from colleagues can even override an organization’s efforts to highlight an executive’s stance toward ethics. According to a qualitative study conducted by Walker, Pitts, Hennig and Matsuba (1995) people tended to look toward others with whom they had close working relationships as role models. When these coworkers act unethically and those actions benefit their organization, it is more likely that new employees will follow in those footsteps.

We propose that the socialization received by a new employee many be ethical or unethical. While ethical socialization is likely to come via more formal channels (ethics training, provision of a corporate code of ethics upon joining, ethics policies mentioned at orientation, etc.) the informal socialization provided by colleagues may be quite different. When colleagues endorse and engage in unethical behavior, it sends a signal to the newcomer that unethical behavior is not only tolerated but part of the cultural norms in the organization.

Based on the preceding review, we believe that when unethical socialization is present, it is more likely that an individual will engage in UPBs. The process of unethical socialization provides a strong signal that UPBs are normative behavior within the organization, allowing employees to justify their own UPBs. Further, insiders protect those who perform UPBs in organizations where unethical socialization exists, keeping these actions secret from those outside the organization. Therefore our third proposition is:

   Proposition 3. Unethical socialization is positively related to UPB.

Lax Enforcement of Ethics Code Violations. Becker’s (1968) economics-of-crime model proposed that individuals engage in a mental calculus of weighing the benefits of criminal activity against the probability of being caught and the severity of punishment assessed. In this neo-classical economic perspective it is logical to assume that compliance is a function of
enforcement. The enforcement of rules sends strong signals regarding what is expected and what behaviors will not be tolerated.

In their study of personnel hiring decisions in an experimental setting, Petersen and Krings (2009) observed that simply having an organizational code of conduct denouncing discriminatory hiring practices was not sufficient in changing organizational behavior. The researchers found that an immediate supervisor’s desire to maintain the homogeneity of the group’s composition could cause the subject to disregard their own and the organization’s publicly stated beliefs about fair hiring practices. As they noted, only when codes of conduct are actively enforced and engrained in the organizational culture do they begin to live up to their promise.

Kelling and Wilson (1982) put forth an influential theory known as the broken window theory that proposed that police enforcement of minor crimes sent a message to the community at large that crime of any kind would not be tolerated. It was proposed that the enforcement of minor crimes that created disorder would deter violent crime and improve the overall quality of life in the community. While the effectiveness of this theory and its impact on crime has been hotly debated (Harcourt & Ludwig, 2006), the basic premise does appear to be intuitively correct. That is, that the enforcement of all rules sends signals to a collective of people that unethical behavior will not be tolerated.

Based on this review, we propose that lax enforcement of ethics code violations sends a signal to employees that the organization is tolerant of unethical behavior. We believe that lax enforcement is especially likely when the unethical behavior in question is intended to benefit the organization because employees can justify their actions via moral justification or dehumanization. We believe that when a company does not consistently enforce ethics code violations individuals will be more likely to engage in UPBs. Therefore, our fourth proposition is:

**Proposition 4. Lax enforcement of ethical policies is positively related to UPB.**

**Individual Characteristics that Influence UPBs**

The initial conceptualization of UPBs by Umphress, et al. (2010) proposed that UPBs were influenced by organizational commitment and positive reciprocity beliefs. In two different studies that they conducted they did not find main effects for these variables but did find an interaction effect in both studies. We include these constructs in our mode for two reasons. First, if we are able to replicate this interaction effect in a different setting or utilizing a different measurement technique then we will provide additional data supporting the work of Umphress
and her colleagues (2010). Second, and perhaps more importantly, we leave open the opportunity of discovering if there are interaction effects between the individual difference constructs those authors propose and the forces external to the individual that we propose. A review of the findings of the Umphress et al (2010) article follows.

**Organizational Identification.** According to social identity theory, people classify themselves and others into categories (Tajfel & Turner, 1985). Ashforth and Mael (1989) suggest that one of the categories that employees use in classifying themselves is membership in their organization. They suggest that the organization to which an individual belongs may provide at least part of the person’s response to the question “Who am I?” (Ashforth & Mael, 1989, p. 22). Therefore, it is argued that organizational identification is a specific form of social identification. The stronger an individual’s organizational identification, the more likely it is that the person behaves in accordance with organizational norms or values (Ashforth & Mael, 1989). Ashforth & Anand (2003) propose that individuals who strongly identify with their organizations may choose to put organizational standards above their own personal standards in situations that may benefit the organization.

**Positive Reciprocity Beliefs.** Social exchange theory (Blau, 1964) asserts that relationship quality is developed through the exchange of benefits. Further, research suggests that in exchange relationships benefits are given with the expectation that a benefit will be received in return (Clark & Mills, 1979). Individuals differ in the extent that they endorse reciprocity in relationships (Umphress et al, 2010). Those who hold positive reciprocity beliefs are more likely to engage in reciprocal exchange behaviors and feel more obligated to reciprocate benefits that are received.

Umphress et al. (2010) conducted two studies and found in each that the interaction of organizational identification and positive reciprocity beliefs was a strong predictor of UPBs. Those with strong organization identification who also exhibited positive reciprocity beliefs were more likely to engage in UPBs. This finding informs the last section of our model regarding individual difference variables.

**DISCUSSION**

This paper adds to the body of growing knowledge in the area of UPBs by proposing environmental forces are likely to further explain the complex phenomenon known as UPB. These environmental forces are part of the organizational culture and influence the behavior of organizational actors. Organizational culture is defined as “the common set of assumptions, values, and beliefs shared by organizational members” (Trevino, 1986, p. 611) and is one of the principal factors that affects individual behavior (Weiner & Vardi, 1990) and misconduct (Vardi & Weiner, 1992). In addition, the organizational culture provides collective norms which guide
behavior (Trevino, 1986). In effect, the organizational culture is the environment in which employees work. We believe it is important to look beyond individual differences and also explore the environment in which an employee works to explain UPBs.

While Umphress et al. (2010) explored the importance of individual differences in promoting UPB, we build on this work by proposing that forces external to the individual also make UPBs more likely. While individual differences are one force that drives employee behavior, we believe that a fuller picture emerges when we consider the influence of organizational leaders and features of the environment in which the individual works.

LIMITATIONS

The study of unethical behavior comes with a set of challenges well known to researchers. It is a concept that is difficult to capture. If researchers use self-report data to measure behavior, the actual level of unethical behavior is likely to be under reported. Individuals who have justified their unethical acts may no longer view them as unethical and therefore not report them as such. Further, even if an individual recognizes that their acts were unethical, they may not report them due to a desire to a social desirability bias despite assurances that responses are confidential. Having others report the unethical acts of co-workers is fraught with its own set of difficulties regarding the reliability of the data received. In situations that we have described in this paper, it is likely that UPBs have become normative behavior in the organization. Once individuals become insiders in these organizations they likely feel beholden to guard the organizations secrets and would be less likely to report them. Any empirical work that seeks to further understand and define UPBs will need to take these limitations into account when designing the study.

Following this logic, while we base our model on Umphress et al.’s 2010 study, we believe that further empirical work will be required to strengthen the findings from that study. Umphress et al. (2010) used a self-report instrument to measure UPB. The reliability of the results is therefore subject to self-report bias. A more robust method of studying this relationship might occur in a laboratory setting where actual behavior could be observed and coded. Any findings produced in a laboratory setting would strengthen the foundation upon which we based our model and add to the knowledge the academic community has regarding UPB.

CONCLUSION

Understanding UPBs requires an understanding of not only the individual differences that make UPBs more likely, but also understanding the environmental factors that may influence this behavior. We propose that unethical leadership, a leadership vacuum, unethical socialization and lax enforcement of ethics code violations all influence an organizational actor’s likelihood of engaging in unethical activities that assist the organization.
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GOAL ORIENTATION AND SELF-DEFEATING BEHAVIOR: THE MEDIATING ROLE OF ADAPTIVE AND MALADAPTIVE PROCESSES

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ABSTRACT

Existing theories of self-defeating behavior (SDB) largely ignore individual differences in fundamental human motivations. We developed and tested a theoretical framework relating the dispositional effects of goal orientation on SDB as mediated by adaptive and maladaptive processes. The hypothesized model was tested with data from 363 participants using structural equations analysis. The findings provide support for full mediation of the goal orientation and SDB relationship by the hypothesized adaptive and maladaptive processes. These findings are generally consistent with the theory and provide interesting insights into SDB from a goal orientation perspective. Theoretical and practical implications are discussed.

INTRODUCTION

SDB is defined as deliberate or unintentional acts that have clear, definite, or probable mostly unintended negative effects on one’s projects and well-being (Baumeister & Scher, 1988). While SDB shares some conceptual overlap with deviance and counterproductive behavior, they are unique because they do not violate organizational norms or harm others, neither the organization nor its members (Bennett & Robinson, 2003; Spector & Fox, 2005). SDB includes but is not limited to self-handicapping, choking under pressure, helplessness, counterproductive bargaining, substance abuse, neglecting personal health procrastination, self-handicapping, escalation of commitment, interpersonal deviance, inability to delay gratification and emotional self-absorption (Baumeister & Scher, 1988; Harris & Sutton, 1983; Steel, 2007; Van Eerde, 2000; Greenberg, 1985 Moon, 2001; Staw, 1981 Thau, Aquino, & Poortvliet, 2007; Renn et al, 2005). Studies have demonstrated that the aforementioned SDBs can sabotage performance (Steel, Brothen, & Wambach, 2001; Wolters, 2003), decision quality (Baumeister, Twenge, & Nuss, 2002; Staw, 1997), goal setting (Baumeister et al., 1994; Greenberg, 1985), prosocial behavior (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007), and self-management (Renn, Allen, Davis, Fedor, 2005; Renn, Allen, & Huning, 2009; Twenge, Catanese, & Baumeister, 2002). Although SDB is common and undermines important work-related criteria, surprisingly little organizational research has examined why employees engage in SDB.

Because SDB runs counter to the pursuit of rational self-interest, it has puzzled researchers for decades (Twenge, et al., 2002). Psychological research and a few organizational studies suggest the antecedents to SDB to primarily be found in self-esteem (threatened egotism), dysfunctional cognition, and self-regulation failure (Cudney & Hardy, 1991; Baumeister, 1997). Furthermore,
recently introduced theories suggest that personality (i.e. FFM) and social exclusion contribute to SDBs (Twenge, et al., 2002; Renn, et al., 2005). Nevertheless, SDB represents an antithesis to the rational models of work motivation, leaving researchers’ and practitioners’ questions about the motivations underlying SDB unanswered.

However, we believe that motivational constructs hold promise for explaining the causes of SDB. Specifically, goal orientation holds promise as a causal antecedent to SDB (DeShon, Gillespie, 2005). Goal orientation refers to preferences for learning and performance goals in achievement situations, which are viewed as stable personality characteristics fostered by “self-theories” about the nature and development of attributes of people (i.e. intelligence, personality, abilities, and skills) (Dweck, 1999). We will draw on goal orientation theory because goal orientations have been linked to many valued work behaviors in organizations such as task performance, citizenship behavior, learning, and self-regulation (Brett & VandeWalle, 1999; Rioux & Penner, 2001; Covington, 2000; Elliot, 2005; Pintrich, 2000b; Molden & Dweck, 2006). Self-regulation is defined by processes that enable an individual to guide goal directed activities including the modulation of thought, affect, and behavior, which plays an integral role in the formation of SDB (Kanfer, 1990; Karoly, 1993; Zimmerman, 2001). However, we are unaware of any theoretical frameworks or studies of the motivations that underlie the formation of SDB.

The purpose of this study is to test a theoretical framework which posits that the personality trait “goal orientation” predispose individuals to engage in SDBs. Our framework views motivational differences as distal antecedents and self-regulation failure as proximal antecedent to SDBs. The selection of variables in this study is based on a review of the literature that suggests the hypothesized linkages. Linking goal orientation to SDB extends research on individuals’ motivational differences. This extension may offer new insights into job performance. Job performance, according to Diefendorff and Mehta (2007), is as much a function of deviant behavior as it is of constructive efforts. In so doing, we will advance knowledge about the antecedents of and processes contributing to SDBs. Following the work of Renn and his colleagues (2005), I expect a contribution of this study to be the introduction of goal orientation as a personality trait-like distal antecedent to SDB. Figure 1 depicts the hypothesized theoretical framework.
FIGURE 1 - Hypothesized Model A

Learning Goal Orientation
- H1a
- H1b

Performance Goal Orientation
- H2a
- H2b
- H2d

Intrinsic Motivation
- H3b

Effort Attribution
- H3a

Loss of Self Worth
- H4a
- H4b
- H7a

Behavioral Disengagement

Escalation of Commitment

Inability to Delay Gratification

Procrastination

Rumination
- H5a
- H6a
- H6b

Self-Handicapping

*Direct effects omitted from model.*

Page 180
HYPOTHESES

Goal Orientation and Adaptive and Maladaptive Processes]

Goal orientations and their underlying implicit theories may be the root of adaptive or maladaptive behavior patterns because they correspond with challenge response patterns which function similarly to self-regulation strategies. Dweck and her colleagues have identified the maladaptive “helpless” pattern and the more adaptive “mastery-oriented” behavioral pattern as outcomes of differences in goal orientation (Dweck 1975; Diener & Dweck, 1978). On the one hand, studies have shown that learning goal oriented individuals are prone to engage in adaptive patterns such as intrinsic motivation, and attributions to effort (Dweck, 1986; Dweck & Elliott, 1988). This adaptive stance toward obstacles appears to aid in the accomplishment of goals and has been associated with higher performance levels than performance oriented individuals. On the other hand, a performance goal orientation creates a vulnerability to maladaptive (helpless) response patterns (Diener & Dweck, 1978; 1980; Nicholls, 1984), which is characterized by an avoidance of challenges, withdrawal of effort and energy from tasks, low intrinsic motivation, rumination, loss of self-worth, and a deterioration of performance (Ames, 1992; Church, Elliot, & Gable, 2001; Dweck, 1986). Hence, it is hypothesized that learning goal orientation is positively related to intrinsic motivation and effort attribution, while performance goal orientation is positively related to loss of self worth, behavioral disengagement, and rumination.

Hypothesis 1a. Learning goal orientation is positively related to intrinsic motivation.

Hypothesis 1b. Learning goal orientation is positively related to effort attribution.

Hypothesis 2a. Performance goal orientation is positively related to loss of self-worth.

Hypothesis 2b. Performance goal orientation is positively related to behavioral disengagement.

Hypothesis 2c. Performance goal orientation is positively related to rumination.

Learning Goal Orientation and Escalation of Commitment

Escalation of commitment, or misguided persistence, typically manifests as the tendency to continue to invest in a losing course of action although the likelihood of failure is high and perhaps even certain (Staw, 1976). The causes of escalation of commitment can be found in self-justification, problem framing, sunk costs, goal substitution, self-efficacy, accountability, and illusion of control (Wong, Yik, & Kwong, 2006). Persistence, while typically desirable, can progress into escalation of commitment when it is misguided. Studies have linked persistence to
learning goal oriented individuals suggesting that escalation of commitment and learning goal orientation may be related (Molden & Dweck, 2006). Learning goal-oriented individuals recognize failures as part of the learning process and valuable sources of information, which leads us to conclude that they may continue to invest in a failing course anticipating that the long-term outcome of continued learning outweighs the failure. This may result in escalated commitment.

**Hypothesis 3a.** Learning goal orientation is positively related to escalation of commitment partially mediated by a positive relationship between intrinsic motivation and escalation of commitment.

**Hypothesis 3b.** Learning goal orientation is positively related to escalation of commitment partially mediated by positive relationship between effort attribution and escalation of commitment.

**Performance Goal Orientation and Procrastination**

Procrastination, the tendency to delay initiation or completion of important tasks to the point of discomfort (Solomon & Rothblum, 1984), often results from failure to self-regulate (Howell & Watson, 2007). Procrastination has harmful effects on individual performance and well-being (Steel, 2007; Tice & Baumeister, 1997). Procrastination should positively correlate with performance goal orientation because of performance goal oriented individuals’ concerns about performance avoidance, failure, incompetence, and helplessness (Howell & Watson, 2007). Further, research has demonstrated that rumination is not only a SDB in itself but it also mediates between personality and procrastination (Renn et al., 2009). Hence, we suggest, that rumination may extend into procrastination.

**Hypothesis 4a.** Performance goal orientation is positively related to procrastination, partially mediated by behavioral disengagement.

**Hypothesis 4b.** Performance goal orientation is positively related to procrastination, partially mediated by a loss of self-worth.

**Hypothesis 4c.** Performance goal orientation is positively related to procrastination, partially mediated by rumination.
Performance Goal Orientation and Rumination

Although self-focus is beneficial in self-regulation, inactivity in rumination is a SDB that involves excessive self-focus (Carver & Scheier, 2000). When individuals misallocate a disproportional amount of attentional resources to rumination, they may not engage in other important activities leading to behavioral dysfunction and performance impairment (Pyszczynski, Greenberg, Hamilton, & Nix, 1991; Kanfer & Ackerman, 1989; Renn, 2005). Performance goal-oriented individuals tend experience helplessness and tend are motivated by avoidance, which almost by definition seems characteristic of an individual that tends to ruminate over things. Helpless individuals reportedly experience loss of self-worth, tend to disengage and withdraw from their tasks, and suffer from low intrinsic motivation in achievement situations where they might lack necessary skills.

Hypothesis 5a. Performance goal orientation is positively related to rumination, partially mediated by behavioral disengagement.

Hypothesis 5b. Performance goal orientation is positively related to rumination, partially mediated by loss of self-worth.

Performance Goal-Orientation and Self-Handicapping

According to Berglas and Jones (1978) self-handicapping is defined as any action or choice of performance setting that enhances the opportunity to externalize (or excuse) failure, thereby protecting the individual’s ego. Although self-handicapping objectively increases the likelihood of failure, it protects one’s self-image by making the future uncertain. The added benefit is that if one does in fact succeed, then this can be attributed to extraordinary ability (Urdan & Midgley, 2001). Consistent with the characteristics of performance goal oriented individuals, self-handicapping allows individuals to avoid negative appraisals and avoid threats to self-esteem. Self-handicappers were found to use coping strategies focused on withdrawal and negative self-focus (i.e., emotional self-absorption).

Hypothesis 6a. Performance goal orientation is positively related to self-handicapping, partially mediated by behavioral disengagement.

Hypothesis 6b. Performance goal orientation is positively related to self-handicapping, partially mediated by loss of self-worth.
Inability to delay gratification involves acting impulsively to enjoy immediate pleasurable rewards instead of waiting for delayed and perhaps greater rewards (Mischel, 1974). Delaying gratification requires individuals to exercise self-control over their impulses (Tice, Bratslavsky, & Baumeister, 2001). When people disengage, mentally and behaviorally, from their tasks and withdraw time and effort, they tend to pursue short term goals over long term goals and act impulsively. Performance goal oriented individuals often fail to see value in long term goals and re-orient their focus on short-term goals, which yield immediate benefits (i.e. face saving, protecting self-esteem). Without the establishment of long-term personal goals, they cannot withstand the seduction of immediate pleasures in their efforts to delay gratification (Baumeister et al., 1994; Fujita, Trope, Liberman, & Levin-Sagi, 2006).

Hypothesis 7a. Performance goal orientation is positively related to inability to delay gratification, partially mediated by behavioral disengagement.

METHOD

Sample and Data Collection

Participants were 363 students at a regional state university located in the southeastern United States. The sample consisted of graduate and undergraduate students at the university’s college of business. The descriptive statistics of the sample are as follows: 51.2% females, 47.1% males; 1.7% did not answer this question. The mean age was between 23 and 25 years old with 9.9% of the sample age 35 or older. 56.5% white (non-Hispanic), 30% African-American, 4.7% Hispanic, 3.6 Asian, .6 Native American, and 2.2% “other”, 43.3% had high-school diplomas, 11.8% associate degrees, 38.9% bachelors degree, and 3.9% master’s degrees. .3% stated they had doctorates. The average work experience of this sample was 6 years and 5 months.

Measures

Goal orientation was measured with the instrument developed by VandeWalle (1997). Learning goal orientation as measured with 6 items and performance goal orientation was measured with 5 items from VandeWalle’s instrument. Two sample items from the goal orientation scale include, “I often read materials related to my work to improve my ability; “I am willing to select a challenging work assignment that I can learn a lot from.” (1 = “Strongly Disagree”; 6 = “Strongly Agree”). Loss of self-worth was measured with 3 items from Grant & Dweck (2003). A sample items was “If I did poorly on my job, I would feel like a loser”). (1 = “I usually don’t
do this at all to” 4 = “I usually do this a lot”). Intrinsic motivation was also measured with 3-
items from (Hackman & Lawler, 1971). A sample item was “I feel a great sense of personal
satisfaction when I do my job well”. (1 = “Not at all true of me”; 7 = “Very true of me”).
Behavioral disengagement was assessed with a 4 item scale (Carver, Scheier, & Weintraub,
1989). A sample item was “I admit to myself that I can’t deal with things and quit trying”. (1 = “I
usually don’t do this at all to” 4 = “I usually do this a lot”). Rumination was measured using a
short-version used by Grant & Dweck (2003). (1 = “Describes me very well”; 5 = “Does not
describe me at all”). A sample item was “I tend to “ruminate” or dwell over things that happen to
me for a really long time afterward.” Effort attribution was measured with a 3-item scale which
we adapted from a single-item instrument used by Grant and Dweck (2003). A sample item was
“I think that if I work harder I can do better”. (1 = “I usually don’t do this at all to” 4 = “I usually
do this a lot”). Inability to delay gratification was measured with five items adopted from
previous studies (Funder & Block, 1989; Giner-Sorolla, 2001). A sample item was, “Things you
have to wait for are the most worthwhile”. (1 = “Strongly agree”; 5 = “Strongly disagree”).
Procrastination was measured with 9 items from previous studies (Lay, 1986). A sample item was,
“I often find myself performing tasks I had intended to do days before” Again, as expected
this scale proved to have acceptable reliability. (1 = “Does not describe me at all”; 5 =
“Describes me very well”). Self-handicapping was measured with an adapted version of
Midgley and Urdan’s academic self-handicapping (Midgley & Urdan, 2001). A sample item was,
“Some employees fool around the night before an important day so that if they don’t do well
they can say that is the reason. How true is this of you?” (α = .90). (1 = “Not at all true of me”; 7
= “Very true of me”). Escalation of commitment was assessed with an adaptation of the blank
radar plane scenario (Arkes & Blumer, 1985; D.E. Conlon & Garland, 1993; Garland, 1990;
Garland & Conlon, 1998). On the basis of the scenario, participants indicated via two questions
on a scale of 0 to 100% the extent to which they would continue to pursue the project and invest
more resources toward its completion. Personality, specifically conscientiousness and
neuroticism, was measured with the BFI (Big Five Inventory) according to Oliver John. On both
scales, participants indicated their agreement on a 5 point Likert-type response scale (1 =
“Disagree strongly disagree”; 5 = “Agree strongly”). Conscientiousness was measured with 9
items. Neuroticism was measured with 8 items. In order to measure conscientiousness,
participants rated their agreement on an item such as “I see myself as a person who does a
thorougb job. A sample items representing neuroticism was, “I see myself as someone who is
depressed, blue”. Generalized self-efficacy was assessed with the 8-item scale developed by
Chen et al. (2001). (“1 = Strongly disagree”; “6 = Strongly agree”). A sample items was: “I will
be able to achieve most of the goals I have set for myself”.

185
RESULTS AND ANALYTIC STRATEGY

Prior to conducting the test of our hypotheses, we subjected the data to confirmatory factor analyses. Initially, we tested a measurement model that freed all paths from each indicator item to its respective latent construct (Anderson & Gerbing, 1988). The measurement model fit the data quite well: $\chi^2 (1026) = 1459.31; \chi^2/df = 1.42; NFI = .847; TLI = .94; CFI = .948; RMSEA = .034$ (Hu & Bentler, 1999). We conducted a Harmon one factor test for common method variance (Podsakoff et al., 2003). The single factor solution exhibited a significantly deteriorated chi square and produced poor fit indices: $\chi^2 (1080) = 6973.29; \chi^2/df = 6.46; NFI = .27; TLI = .12; CFI = .29; RMSEA = .12$, exceeding the threshold of 81.07 for 54 degrees of freedom ($\Delta \chi^2 (54, N=363) = 5514, p <.01$). The other fit indices provide additional evidence that the measurement model is a better fit to the data. This suggests that common method variance does not pose a statistically significant threat to the results.

Model Estimation and Hypotheses Testing

Table 1 depicts the means, standard deviations, and zero-order Pearson correlations among all study variables and control variables. We subjected the theoretical model to structural equation analysis using AMOS 7. The model provided acceptable fit indexes: ($\chi^2 [1857] = 2961.10; \chi^2/df = 1.60; NFI = .78; TLI = .90; CFI = .90; RMSEA = .04$).

Hypotheses 1a stated that a learning goal orientation is positively related to intrinsic motivation. The results supported that learning goal orientation is positively associated with intrinsic motivation ($\beta = .28, p <.01$). Hypothesis 1b, which stated that a learning goal orientation is positively related to effort attribution, was also supported. The relationship between learning goal orientation and effort attribution was significant ($\beta = .16, p <.05$).

Hypotheses 2a-c suggested that a performance goal orientation would be related to maladaptive patterns. The results provide general support for hypothesized relationships between goal orientations and adaptive or maladaptive processes. Performance goal orientation is positively related to a loss of self worth ($\beta = .17, p < .01$), to behavioral disengagement ($\beta = .50, p < .01$), and rumination ($\beta = .19, p < .01$). These results

Hypothesis 3a and 3b stated that the positive relationship between learning goal orientation and escalation of commitment is partially mediated by intrinsic motivation and effort attribution respectively. Hypothesis 1a regarding the path between learning goal orientation and intrinsic motivation was supported ($\beta = .28, p < .01$), consistent with the hypothesized direction. Further,
the relationship between intrinsic motivation and escalation of commitment was significant \( (\beta = -.13, p < .05) \). However, the sign of the parameter estimate is in the opposite direction than was hypothesized. The results of a Sobel test show that the indirect effect of learning goal orientation on escalation of commitment through intrinsic motivation is statistically significant (indirect effect = .03, \( p < .05 \); Sobel, 1982; Wood, Goodman, Beckman, Cook, 2008). The direct effect between learning goal orientation and escalation of commitment was not statistically significant. Therefore results indicate that learning goal orientation has a significant indirect effect on escalation of commitment fully mediated by intrinsic motivation. The results did not provide support for hypothesis 3b. Although learning goal orientation was positively related to effort attribution, the parameter estimate for the path between effort attribution and escalation of commitment was not statistically significant. Hypotheses 4a-c stated that a positive relationship between performance goal orientation and procrastination would be partially mediated by behavioral disengagement, loss of self-worth, and rumination. Based on the current literature on SDBs, we controlled for conscientiousness (Renn et al, 2005; Renn et al, 2009). The relationships between performance goal orientation and loss of behavioral disengagement, self-worth, and rumination were found to be statistically significant and positive consistent with hypotheses 2a – 2c. Further, the data suggest a statistically significant positive relationship between rumination and procrastination \( (\beta = .13, p < .05) \).
TABLE 1
Means, Standard Deviations, Reliabilities, and Correlations among all Variables

<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>
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<th>11</th>
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<td>Learning goal orientation</td>
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<td>Performance goal orientation</td>
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<td>1.03</td>
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<tr>
<td>Intrinsic motivation</td>
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<td>1.04</td>
<td>0.27**</td>
<td>-0.15**</td>
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<tr>
<td>Behavioral disengagement</td>
<td>1.40</td>
<td>0.48</td>
<td>-0.42**</td>
<td>0.42**</td>
<td>-0.14**</td>
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<tr>
<td>Rumination</td>
<td>2.93</td>
<td>0.81</td>
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<td>0.34**</td>
<td>0.06</td>
<td>0.32**</td>
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<tr>
<td>Effort attribution</td>
<td>3.49</td>
<td>0.67</td>
<td>0.14**</td>
<td>-0.07</td>
<td>0.08</td>
<td>-0.15**</td>
<td>0.11*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of self-worth</td>
<td>1.80</td>
<td>0.85</td>
<td>-0.04</td>
<td>0.16**</td>
<td>0.11*</td>
<td>0.15**</td>
<td>-0.25**</td>
<td>-0.03</td>
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</tr>
<tr>
<td>Self-handicapping</td>
<td>1.90</td>
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<td>0.51**</td>
<td>-0.16**</td>
<td>-0.11</td>
<td>0.15**</td>
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<td></td>
</tr>
<tr>
<td>Procrastination</td>
<td>2.83</td>
<td>0.72</td>
<td>-0.34**</td>
<td>0.30**</td>
<td>0.13*</td>
<td>-0.36**</td>
<td>0.30**</td>
<td>-0.05</td>
<td>0.17**</td>
<td>-0.32*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Inability to delay gratification</td>
<td>2.48</td>
<td>0.83</td>
<td>-0.17**</td>
<td>0.02</td>
<td>-0.10</td>
<td>-0.05</td>
<td>0.12*</td>
<td>-0.10</td>
<td>0.6</td>
<td>0.12</td>
<td></td>
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<tr>
<td>Escalation of commitment</td>
<td>61.11</td>
<td>25.1</td>
<td>0.09</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.05</td>
<td>0.00</td>
<td></td>
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</tr>
<tr>
<td>Self-efficacy</td>
<td>5.00</td>
<td>0.71</td>
<td>0.40**</td>
<td>-0.29**</td>
<td>0.14**</td>
<td>-0.43*</td>
<td>-0.14**</td>
<td>0.20**</td>
<td>-0.06</td>
<td>-0.34**</td>
<td>-0.20**</td>
<td>-0.18**</td>
<td>0.13*</td>
<td></td>
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</tr>
<tr>
<td>Conscientiousness</td>
<td>3.79</td>
<td>0.62</td>
<td>0.44**</td>
<td>-0.42**</td>
<td>0.22**</td>
<td>-0.57**</td>
<td>-0.33**</td>
<td>0.19**</td>
<td>-0.14**</td>
<td>-0.48**</td>
<td>0.63**</td>
<td>-0.09</td>
<td>0.09</td>
<td>0.40**</td>
<td></td>
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</tr>
<tr>
<td>Neuroticism</td>
<td>2.64</td>
<td>0.81</td>
<td>-0.26**</td>
<td>0.32**</td>
<td>0.02</td>
<td>0.24**</td>
<td>0.46**</td>
<td>-0.10</td>
<td>0.26**</td>
<td>0.19**</td>
<td>0.28**</td>
<td>0.03</td>
<td>-0.09</td>
<td>-0.29**</td>
<td>-0.36**</td>
<td>(0.83)</td>
</tr>
</tbody>
</table>

**Correlation is significant at the .01 level.
*Correlation is significant at the .05 level.
Again, we performed a Sobel test for the hypothesized indirect effect of rumination between performance goal orientation and procrastination. The results provide support for the indirect relationship between performance goal orientation and procrastination through rumination ($\beta = .06, p < .05$), partially supporting hypothesis 4c. Neither behavioral disengagement nor loss of self worth was statistically significantly related to procrastination. Thus hypothesis 4a and 4b were not supported. However, we found the indirect relationship of performance goal orientation on procrastination through loss of self worth marginally significant ($\beta = .06, p = .09$) according to the Sobel test. Thus, hypothesis 4c was partially supported.

Hypothesis 5a-b stated partial mediation between performance goal orientation and rumination through behavioral disengagement and loss of self worth. Results for hypotheses 2a and 2b found that the relationships between performance goal orientation and behavioral disengagement as well as loss of self-worth were statistically significant in the predicted direction. The standardized path coefficients between behavioral disengagement and rumination as well as loss of self worth and rumination were estimated to be .19 and .14 respectively. Further, we found that the direct effect between performance goal orientation and rumination was statistically significant ($\beta = .19, p < .01$). Sobel tests show that the indirect effect between performance goal orientation and rumination through loss of self-worth was statistically significant ($\beta = .12, p < .05$). Also, the indirect effect between performance goal orientation and procrastination through behavioral disengagement was statistically significant ($\beta = .12, p < .01$). The standardized indirect effect was estimated to be .12. Collectively, hypotheses 5a and 5b were supported.

Hypotheses 6a-b stated that the relationship between performance goal orientation and self-handicapping is partially mediated by disengagement and loss of self-worth. Behavioral disengagement was positively related to self-handicapping ($\beta = .57, p < .05$) while loss of self-worth was not, ruling out an indirect effect through loss of self-worth. The Sobel test provides some support for hypothesis 6a (indirect effect = .30, $p < .01$). The direct effect between performance goal orientation and self-handicapping was not statistically significant, indicating that the relationship between performance goal orientation and self-handicapping was fully mediated by behavioral disengagement. This provides partial support for hypothesis 6a. Hypothesis 6b was not supported.

Hypothesis 7a stated that performance goal orientation is positively related to inability to delay gratification partially mediated by behavioral disengagement. The relationship between behavioral disengagement and inability to delay gratification is significant ($\beta = .15, p < .05$), consistent with the hypothesized direction. The indirect effect of performance goal orientation through behavioral disengagement on inability to delay gratification was supported ($\beta = .07, p < .05$) as indicated by the Sobel test. However, the direct effect of performance goal orientation on inability to delay gratification was not significant when controlling for neuroticism, providing evidence for full mediation of behavioral disengagement between performance goal orientation and inability to delay gratification.
and inability to delay gratification. Altogether, there is partial support for hypothesis 7a. The final model with all significant path estimates can be found in Figure 2.
All standardized path coefficients are significant at or beyond $p < .05$. 

FIGURE 2 - Path Estimates of Final Model$^a$

$^a$ All standardized path coefficients are significant at or beyond $p < .05$. 

Intrinsic Motivation 
-0.13 
Escalation of Commitment 

Inability to Delay Gratification 

Procrastination 

Behavioral Disengagement 

Self-Handicapping 

Learning Goal Orientation 

Performance Goal Orientation 

Effort Attribution 

Loss of Self Worth 

Rumination 

Gratification 

DISCUSSION

The present field study was designed to test a theoretical framework of the predispositional effects of goal orientation on SDB and the mediating effect of adaptive and maladaptive processes between individual differences in goal orientation and SDB. Although the results did not provide support for all the framework’s hypotheses, the results are generally consistent with the hypothesized linkages among goal orientation, adaptive and maladaptive processes, and SDB. Collectively, the results provide support for the self-regulation failure perspective of SDB as well the individual level personality based theory of SDB (Renn et al., 2005).

Theoretical Implications

The present study has broad important theoretical implications for SDB and goal orientation research. The findings provide a new perspective that suggests individuals are motivated to engage in SDB by individual differences in achievement motivation. The study supports the notion that individual differences in goal orientation predispose individuals to specific adaptive and maladaptive self-regulatory processes. Moreover, the finding that adaptive and maladaptive processes mediate between goal orientations and SDB provide additional support for the self-regulation failure perspective of SDB (Baumeister, 1997). Responding to achievement situations inadequately by adopting maladaptive processes constitutes failure to self-regulate, which results in self-defeating behavior.

On a more specific level, the findings further address the question posed by DeShon and Gillespie (2005) who asked future researchers of goal orientation to investigate why some individuals pursue challenging tasks, whereas others avoid them or even seek out self-handicapping activities. We found that performance goal orientated individuals tend to withdraw themselves when facing adversity unlike the learning goal oriented individual. This is consistent with the notion that individuals who self-handicap attempt to externalize reasons for failure, which allows them to build excuses for failure, protect their self-esteem, or attribute success even more to their ability. This notion was supported with the indirect effect of performance goal orientation on self-handicapping.

According to VandeWalle et al (1999), a learning goal orientation is typically associated with more positive achievement outcomes than a performance goal orientation due to the ability of learning oriented individuals to adopt adaptive processes that, in turn, lead to higher goals and ultimately performance. We found support for this notion in that learning goal oriented individuals adopt adaptive processes and effective learning strategies allowing them to learn and judge situations including understanding when it is prudent to quit. Therefore, learning goal oriented individuals are less likely to escalate their commitment to a failing course of action.

This study also provides evidence bearing on Payne, Youngcourt, and Beaubien’s (2007) suggestion that procrastination may be an outcome of goal orientation (Payne, Youngcourt, & Beaubien, 2007). We found that performance goal orientation aids in the prediction of an individual’s tendency to procrastinate. While there is not a direct predispositional effect of performance goal orientation, there is evidence of an indirect effect of performance goal
orientation on procrastination through rumination, behavioral disengagement and loss of self worth after controlling for conscientiousness. This means that in achievement situations performance goal oriented individuals tend to adopt maladaptive processes which make them respond with behavioral disengagement and a loss of self-worth. This finding contributes to the literature on procrastination because the mechanism that connects performance goal orientation and procrastination is not well understood.

Practical Implications

The findings have practical implications for selection, training, and job search. It has been found that contingent on work context, managers may select performance oriented individuals because they tend to desire to outperform their counterparts (Yeo, Loft, Xiao, & Kiewitz, 2008). Our findings suggest that performance goal oriented individuals also have the potential to engage in behaviors which could undermine their performance, and therefore, managers should be cognizant of not only the contingencies of the work context, but also be prudent about selecting the adequate individual based on his/her personality-like goal orientations. Further, the belief was widely held that training workers who adopt a learning goal orientation would always be superior to a performance goal orientation. Therefore, consistent with the accumulating evidence that goal orientation can be induced, managers might work toward the goal of designing interventions that induce the most effective goal orientation for a given context (Yeo et al., 2008).

Another practical implication lies in the application of these findings to the situation of the unemployed. It has been recently shown that goal orientations predict job seeking behaviors of the unemployed (Creed, King, Hood, McKenzie, 2009). Results show robust relationship between learning goal orientation and job seeking intensity. Our findings could offer new insights on the relationship between goal orientations and job seeking via the adaptive and maladaptive processes.

Limitations

First, the cross-sectional design does not allow causal inferences. Second, all our measures were obtained from a single source, raising concerns of common variance to bias my results. Yet, the results of a Harman’s one factor test and an examination of the bivariate correlations both suggested that common method variance did not undermine our results. Last, one might suggest that relying on a sample of students allows for limited generalizability of the data to a population of employees. However, our sample may in fact be a more accurate representation of the general population because of the self perpetuating nature of organizational workforces. In organizations, one may find more like-minded people due to the homogenizing effects of organizational selection as well as self selection on part of the employees. Hence, we conclude that this makes our student sample very suitable for the test of our hypotheses. Moreover, our respondents did not have to fear any negative repercussions for honestly reporting maladaptive processes or SDB.

Future Research
The findings from this study allow for some suggestions for future research. Considering the increasing evidence that goal orientations can be induced through intervention, we suggest that future researchers consider such experimental manipulations of goal orientation that also integrated either the possibility of failure or specific failure feedback in order to draw better causal inferences from their findings. This should help clarify the unclear relationships between individual differences in motivation and SDB.

Further, we recommend that researchers adopt new and innovative conceptualizations of human motives to study SDBs. Most recent developments have advanced goal orientation research by integrating approach and avoidance construct into the goal orientation construct (Elliot & McGregor, 2001). We think that a basic conceptualization of approach and avoidance motivation holds much potential to advance our understanding of individuals’ affect, cognitions, and behavior in achievement situations (Elliot & Thrash, 2002). Approach and avoidance personality emerged as a two factor structure with the approach factor composed of extraversion, positive emotionality, and behavioral activation system and the avoidance factor composed of neuroticism, negative emotionality, and behavioral inhibition system. Elliot and Thrash (2002) conceptualized approach and avoidance as personality and found this two factor structure linked to achievement goals. Hence, we think that this conceptualization holds promise for the examination of SDB.

We need to examine potential impact of organizational and task features on the hypothesized relationships. For instance, organizational reward structures and sanctions could influence the strength of the relationship between goal orientation and SDB. In addition, organizational climate perceptions may influence how individuals adopt goal orientations in their respective environments. Last, we agree with Tett and Burnett (2003), who suggested that we need to look deeper into the nature of work situations and psychological processes mediating trait-performance linkages.

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PROACTIVE PERSONALITY AND CITIZENSHIP BEHAVIORS:
EXPLORING THE MODERATING EFFECTS OF PERCEIVED JOB
CHARACTERISTICS

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ABSTRACT

The present study explores relationships between proactive personality and organizational citizenship behaviors. Moderators between these constructs are proposed in order to explain varying levels of dispositional impact on work behavior. These relationships were also tested to see whether proactive personality should be considered a strong or weak trait. Trait activation theory and weak situation theory are used to develop hypotheses. Results indicate a positive relationship exists between proactive personality and organizationally directed citizenship behaviors. This association is moderated by both job autonomy and job meaning. Results also bolster the strong trait argument. Managerial implications and future research directions are discussed.

INTRODUCTION

With recent developments in the global economic picture, organizations are looking for ways to promote proactive behaviors on the part of their workers. Accordingly, firms put in place managerial interventions to encourage workers to act more proactively. One of these interventions is to attract, select and hire individuals who are high in proactive personality. Proactive personality is the tendency of an individual’s orientation towards proactive behaviors, whether it is better job performance, organizational citizenship behaviors (OCBs), learning behaviors, job satisfaction and other relevant job constructs (Fuller & Marler, 2009). Despite its relative newness, proactive personality has been studied often enough to enable the publication of multiple meta-analyses including those by Fuller and Marler (2009) and Thomas, Whitman and Viswesvaran (2010). This work has helped to establish the concept of proactive personality in such a way that makes it an accepted area for further research.

Scholars have recently begun to debate whether proactive personality is a weak or a strong personality construct (Fuller, Hester and Cox, 2010). Locke and Latham (2004) noted the need for further examination regarding the difference between strong and weak personalities, defining a strong personality as one that “should be less constrained by situations than weak ones” (p. 395), and a weak personality as one that is highly influenced by situational factors. Strong personalities are less susceptible to situational factors than weak personalities. Proactive personality is an interaction between various facets of the Big Five Personality traits and thus scholars have assumed that proactive personality is a strong personality trait (Bateman & Crant, 1993). The argument behind this assumption is that individuals should be able to transform their environments, somewhat negating the influence of situational cues and constraints. However, Fuller et al. (2010) argue that proactive personality is not as strong of a personality trait as has been previously suggested. In their work, proactive personality was shown to be moderated by
job autonomy and therefore a claim was made that it should not be defined as a strong personality trait (Fuller et al., 2010).

As a result of this research, several important theoretical and practical implications may be derived from an examination of this claim. The first implication is that workers with higher levels of proactive personality need to be placed in positions where they can be allowed to be proactive (Thompson, 2005). The second is the theoretical implication that proactive behaviors are very much a function of individual difference and situational constraints. This second implication, if true, forces scholars to reconsider whether their current perspective of proactive personality—that people take an active role in shaping their environment—is really warranted.

We extend and evaluate the work of Fuller et al. (2010) by including job meaning as a moderator, by using a more theoretically grounded measure of performance (i.e., organizational citizenship behaviors targeted towards the organization), and by basing our results on a more diverse and representative sample. Therefore, our results provide a better understanding of the following questions relevant to organizations: (a) to what extent could proactive personality be considered a strong or weak personality trait, (b) what situational factors work best with proactive personality and (c) what practical lessons could employers gain from the research provided? Taken together, this research contributes to the literature in a meaningful way.

This paper includes a review of the current understanding of proactive personality and how it leads to performance, especially that performance seen in extra-role behaviors. Hypotheses consistent with Weak Situation Theory (WST) and Trait Activation Theory (TAT) are developed and tested against the information collected from 178 manager-worker dyads. Results, both theoretical and practical, are discussed and future research is proposed.

THEORETICAL BACKGROUND

Proactive personality

Theorists have argued for the need to integrate personality concepts into situational development in order to increase validity (Barrick & Mount, 2005). Accordingly, scholars are moving beyond the Big Five and now consider compound traits such as Core-Self Evaluations (Judge, Locke, & Durham, 1997) or proactive personality. The thrust of this argument is that more specifically limited personality constructs will include situational influences and those situational influences will lead to higher predictive validity.

Proactive personality is rooted within the interactionist perspective (Bandura, 1977; Schneider, 1983; Crant, 1995). The interactionist perspective holds that behavior is internally and externally monitored, such that individuals can dramatically influence, and change their situations, producing higher levels of performance (Crant, 2000). Therefore, the interactionist component of personality, rather than being shaped by, or controlled by the environment, will enable individuals to have the ability to transform their environment.
In addition to its interactionist component, proactive personality is a compound personality trait. According to Hough and Schneider (1996: 57), “Compound personality traits are comprised of basic personality traits that do not at all covary.” As a compound trait, proactive personality is comprised of emotional stability, conscientiousness, openness to experience and extraversion (Bateman & Crant, 1993; Major, Fletcher & Turner, 2006). Emotional stability impacts proactive personality in that people who are emotionally stable are more likely to be confident and grounded. Conscientiousness impacts proactive personality in that individuals who have high degrees conscientiousness are more likely to be motivated and persistent in completing goal-directed behavior. Openness influences proactive personality in that individuals are more likely to become comfortable in seeking out new challenging experiences and less likely to tolerate the status quo. Extraversion is related to proactive personality in that individuals who are high in proactive personality are more likely to be decisive in their decisions and in seeking out new behaviors. Of the major personality traits, conscientiousness and openness to experience are the most likely to be related to proactive personality.

Proactive personality is defined as a “relatively stable tendency to effect environmental change that differentiates people based on the extent to which they take action to influence their environments” (Major et al., 2006: 928). Individuals who are high in proactive personality are considered to be highly proactive. Proactive individuals “identify opportunities and act on them, show initiative, take action and persevere until meaningful change occurs” (Crant, 2000: 439). Proactive personality, unlike the Big Five (Barrick et al., 1993), is thought to be relatively unconstrained by situational factors (Fuller et al., 2010). Meta analyses by both Fuller and Marler (2009) and Thomas et al. (2010) have helped to establish its place in current research.

**Personality and situational interactions**

Personality influences job performance through motivation (Pinder, 1990; Locke & Latham, 2005). Research indicates that the relationship between personality and performance is moderated by situational factors, such as job autonomy and meaning (Barrick & Mount, 1993, 2005). Situation factors provide clues on how to act (Mischel, 1977). For example, autonomy is the extent to which rules exist to monitor behavior. In jobs that lack autonomy, decision-making by the worker is highly constrained as their choices are limited to what management has demanded as necessary. Workers in these situations may lack the necessary resources to make changes to their environment and accordingly act more uniform in terms of behavior (Batt, 1999).

Fuller et al. (2010) determined that autonomy moderates the relationship between proactive personality and performance. In conditions of high autonomy the relationship between proactive personality and performance is stronger. In conditions of low autonomy the relationship between proactive personality and performance is weaker. They concluded that since proactive personality is moderated through autonomy, proactivity is not a strong, or as strong, of a personality construct as scholars thought it to be. Despite these interesting results, there were several limitations to their work. To begin with, their sample consisted of a single organization, which limits the generalizability of the inferences that can be made. Their findings may have been influenced by organizational factors rather than indentifying a true relationship. Their
selection of job performance as a variable may also be limited for several reasons. For example, if the job is a specialized one, then individuals will be unable to add skills or make corrections needed to have the influence of proactive personality. Another limitation is that job performance is a function of general mental ability (g), meaning that individuals could be limited in their ability to perform relevant proactive behaviors. In other words, individuals will not strive for objectives that are beyond their reach (Hunter & Hunter, 1984). Because there is an underlying assumption that proactivity is motivational in nature, a measure of job performance that examines true motivation, rather than motivation and ability, should provide a richer understanding of the job process.

Organizational citizenship behaviors

Because focal job performance is related to intelligence, (Hunter & Hunter, 1984; Motowildo, Borman, & Schmit, 1997; Schmidt & Hunter, 1998) examining non focal performance such as OCBs, should provide better explanations for the effects of proactive personality. Organ (1977) originally developed the concept that focal and contextual performance can be viewed as two separate domains. He and his subsequent coauthors and others have further defined job performance as three distinct domains. Focal job performance is performance that contributes directly to organizational performance and is the result of performing the job which is considered to be in-role (Borman & Motowildo, 1993). Extra role behaviors consist of tasks that are neither required nor rewarded, thus strengthening the organization’s social and psychological core (Motowildo, Borman, & Schmit, 1997; Organ, 1997). These behaviors range from benefiting either the individual, whether it is a coworker, or the supervisor within the organization (Williams & Anderson, 1991). These behaviors have been labeled OCBI (behaviors directed at individuals) or OCBO (behaviors directed at the organization). Behaviors that benefit the organization include activities such as sportsmanship and organizational pride.

OCBs are spontaneous (Organ, Podsakoff, & Mackenize, 2006) and as organizations struggle to monitor performance through traditional economic exchanges (Organ, 1988), stressing social exchanges is needed. Accordingly, OCBs are driven by individuals’ willingness to participate in social exchanges (Organ, 1988). People perform OCBs because they wish to gain something from important organizational agents. In addition, OCBs are driven more by motivation than they are by ability (Motowildo, Borman, & Schmidt, 1997). This leads to a more interesting investigation of the role of personality on performance, since it becomes a matter of ‘will do’ versus ‘can do’. Since personality is focused on behaviors, (Marazolle & James, 2002) and personality influences job performance through motivation (Barrick et al., 2003; Kanfer, 1991; Murray, 1938), our selection of OCBs will aid in the examination between performance and proactive personality. Furthermore, extant research suggests that personality traits will be linked to OCBs (Podsakoff et al., 2000).

HYPOTHESES

Organ et al. (2006) claim that of the Big Five personality traits, conscientiousness and agreeableness should have the strongest relationship with OCBs. Yet, as mentioned above, personality research has gone far beyond the Big Five in considering constructs that are
compound in nature and are tailored to situational aspects. Proactive personality is one of those constructs. We believe that individuals with high proactive personality will be more likely to perform OCBs. This argument is based on the fact that OCBs are a mechanism for which individuals can improve the social and psychological core of their organization. Individuals who are high in proactive personality wish to change their environments and settings, whether it is a state of knowledge (Major et al., 2006) or by leaving the organization (Allen, Weeks & Moffitt, 2005). Individuals high in proactive personality will also be more willing to perform pro-social behaviors, in order to make the work place more enjoyable (Penner, Midili, & Kegelmeyer, 2001). Based on these arguments, the following hypothesis will be tested.

**Hypothesis 1:** Proactive personality is positively related to OCBs; specifically those geared toward the organization (OCBOs).

The findings between some personality measures and OCBs have been underwhelming, especially in comparison to other work attitudes such as job satisfaction (Borman et al., 2001; Organ & Ryan, 1995). Organ and McFall (2004) argue that job characteristics may suppress the effects of personality, as situational influences limit the spontaneous impulses that individuals may have. It would appear that situational cues, such as expectations from supervisors or coworkers, would play a role in determining personality input. This leads to an important question: does autonomy moderate this relationship? If it does, then it would indicate a situational interaction, which would suggest that proactive personality is a strong or weak personality trait. As this paper’s focus is job characteristics that stem from organizations, we focus on OCBs that are directed towards the organization, or OCBOs (Lavelle, Rupp, & Brockner, 2007).

Whether or not autonomy will determine the strength of a personality trait is based on Mischel’s Weak Situation Theory (1977). Weak situations allow for personality to impact work behavior more because workers are allowed more personal discretion. Discretionary behavior allows for individuals to act in a manner that is consistent with their own personality traits because weak situations provide fewer clues as to what is appropriate behavior and consequences for inappropriate behavior (Ickes, Snyder, & Garcia, 1997). In other words, in weak situations, individuals will act in a manner that is consistent with how they view the world. In contrast, strong situations lead different individuals to construe that same situation in the same way; they induce uniform responses across a series of inquiries, require skill uniformity, and provide incentives so that people will act a given way in a set situation (Mischel, 1977).

Therefore, in situations that are weak there will be variance in actions. Spreitzer (1995: 1443) defines autonomy “as an individual’s sense of having a choice in initiating and regulating actions [and]…examples include making decisions about work methods, pace and effort.” Past research has found that personality’s impact on performance is strongest in situations where autonomy is highest (Barrick & Mount, 1993). Therefore, we expect to find that a relationship between proactive personality and OCBs will be increased when autonomy is high.

Another explanation for this relationship is through Trait Activation Theory (TAT; Tett & Burnett, 2003). TAT goes beyond weak situations because it argues that situational cues may
activate a trait. Accordingly, performance is then a function of personality and job traits. Job traits press on the personality trait, and will activate it—if there is a match between the personality trait and situational characteristic. Fuller et al. (2010) found that the relationship between proactive personality and job performance increased in situations with high autonomy. In autonomous situations, individuals find themselves more bound to act in ways that are consistent with their personality. Hence, individuals with high levels of proactive personality will be more aggressive in pursuing new actions because they are not constrained by the situation. Likewise, we expect a similar relationship between proactive personality and OCBs, since individuals who are proactive will then take proactive steps to improve the organization. This scenario should then further improve the relationship between proactive personality and OCBs.

Because autonomy is a work situation, we expect that OCBOs will be impacted. According to James, Rupp, and Brockner (2007) individuals maintain distinct perceptions and have different attitudes and behaviors towards multiple organizational foci. For instance, individuals will hold different opinions and levels of commitment toward coworkers, supervisors, and the organization. Individuals direct their OCBs in several different directions, including, but not limited to, coworkers, supervisors, and the organization. As such, an organizational antecedent will lead to OCBO. Hence, it is expected that individuals will conduct more OCBOs when job or organizational moderators, such as job autonomy, are present, strengthening the relationship. This will occur because the organizational moderator will direct or target the OCB towards the organization, rather than a coworker or supervisor. This should provide more evidence to our situational balanced hypotheses.

**Hypothesis 2:** The relationship between proactive personality and OCBO is moderated by autonomy, such that the positive relationship is strongest when autonomy is highest.

The primary focus of research in terms of situational aspects has been job autonomy. Accordingly, Fuller et al. (2010) were correct to select autonomy as a moderator in the relationship. However, their focus was limited, if individuals do not have any discretionary behavior, then it would not matter how strong the personality trait is because individuals would not be able to act upon it. In traditional scientific management designs, workers have little if any discretion (Batt, 1999). This will be true even in jobs that are considered to be discretionary, so individuals may have a degree of limitation in how they could express themselves at work. Hence, to determine whether or not proactive personality is a strong trait, selecting an alternative moderator is appropriate.

A strong candidate is a moderator such as job meaning. Meaning is the extent to which a situation carries importance for an individual and according to Mischel and Peake (1982) will be a key determinant of behavior. The more meaning a job has to the worker, the stronger the personality-performance relationship is. Conversely, the less meaning a job has, the weaker the personality-performance relationship is. Mischel and Peale (1982) argued that a situation will lend itself to action depending on whether an individual finds it meaningful. As part of their situational discriminativeness argument that individuals must find a situation meaningful, they also posited that individuals must have the ability to perform the task at hand. According to James and Marazolle (2002), situational discriminativeness activates traits through three
mechanisms. First, a situation must be either intrinsically and/or extrinsically meaningful. Second, individuals must have the ability to act on their meaningfulness—if for instance, the situation is beyond their ability, individuals will not devote their energy to complete it. Third, situations that are both attractive and can be approached are subsequently even more attractive and can thus be pursued (Wright & Mischel, 1987). The crux of this argument is that situations influence personality activation through having meaning to individuals.

One way to conceptualize this is to see the extent to which a job has meaning for an individual. Spreitzer (1995: 1443) defined meaning as “the value of a work goal or purpose, judged in relation to an individual’s own ideals and standards”. Job meaning will lead to individuals finding a fit between the job and their own values. For instance, in situations where individuals find no meaning in their job, we expect the relationship between proactive personality and OCBs to be less. We should expect that the relationship between proactivity and OCBs to be stronger when meaning is high. In addition, since OCBs do not require ability, meaning will be the sole situational discriminant. Meaning will also serve as a job characteristics moderator in trait activation theory (Tett & Burnett, 2003).

**Hypothesis 3:** The relationship between proactive personality and OCB is moderated by meaning, such that the positive relationship is strongest when meaning is highest.

**METHOD**

**Sample & procedure**

One hundred seventy-eight full time employees participated in the study. These employees were recruited with the assistance of management students from a large public university in the southern United States. Students were tasked with identifying one to three adults who were currently employed full time, had three years of work experience, and were willing to participate in a research study. Students were rewarded with extra credit for their assistance. Study participants were primarily female (62%), Caucasian (72%), had an average age of 39 years (range 19-72; σ = 12.62 years) and averaged 7 years tenure with their current employer.

Students provided the researchers with initial participant contact information. Participants were then contacted directly by the research team thus ensuring data integrity and participant eligibility. Each respondent then provided their supervisor contact information, and supervisors were then contacted individually by the research team. Three surveys were administered; two to the employees via web survey and one to the supervisors via email with telephone follow up calls to non-responders (no significant differences were detected between these two modes). To minimize concerns of common method biases (see Podsakoff, 2003), the first survey collected control variables and proactive personality, the second collected autonomy and meaning, and the third collected supervisor rated OCB. To ensure candor, participants were assured that individual responses would be kept confidential and that only aggregate data would be reported.

**Measures**
Proactive Personality ($\alpha = .73$). The seventeen-item measure by Bateman and Crant (1993) was used. A representative item is “I am constantly on the lookout for new ways to improve my life.” A five-point Likert-type scale anchored “strongly disagree” and “strongly agree” was utilized, with higher scores indicating greater proactive personality.

Autonomy ($\alpha = .84$). Autonomy was assessed with four items from Spreitzer (1995). A representative item is “I have significant autonomy in determining how I do my job.” A five-point Likert-type scale anchored “strongly disagree” and “strongly agree” was utilized, with higher scores indicating higher levels of autonomy.

Meaning ($\alpha = .96$). Meaning was assessed with four items from Spreitzer (1995). A representative item is “The work I do is very important to me.” A five-point Likert-type scale anchored “strongly disagree” and “strongly agree” was utilized, with higher scores indicating higher levels of meaning.

Organizational Citizenship Behavior ($\alpha = .92$). The six-item OCBO scale from Williams and Anderson (1991) were used to assess OCBs. A representative item is “Takes undeserved work breaks” (reverse scored).

Control Variables. Relationships between performance and demographic variables have been suggested by existing research. For example, Tsui and O’Reilly (1989) suggested that relationships may exist between age, race, gender and performance. Likewise, Weekley and Ployhart (2005) added that tenure may also have a relationship with job performance. To control for these effects, the present study controlled for age, race, gender, and tenure. Additionally, education was included as a demographic control variable.

Analysis

Study hypotheses were assessed using moderated hierarchical linear regression analysis. Preliminary analyses revealed that no violations of the normality, linearity, multicollinearity, and homoscedasticity assumptions existed in the dataset. Both main effects variables were centered prior to creating the interaction term to minimize any non-essential ill-conditioning effects encountered through moderated hierarchical regression analysis (c.f., Aiken & West, 1991). This was accomplished by subtracting the mean value of the variable from the score of each respondent, thus resulting in a variable with the mean value equal to zero. This transformation reduces the potential for multicollinearity among main effect variables to bias the interaction term and its interpretation (i.e., its statistical significance; Cohen, Cohen, West & Aiken, 2003). Control variables were entered in at Step 1, main effects in Step 2, and interaction effects in Step 3.

RESULTS

Summary statistics are reported in Table 1. The reliability estimate of each latent variable scale measurement was acceptable. Alpha reliabilities are listed in parentheses on the diagonal of Table 1. Results for all three hypotheses are reported in Table 2. Hypothesis 1 posited that proactive personality is positively related to OCBO, but no main effects were detected in this sample at step 2 of the regression. However, once the full model was tested including the
interaction terms (see below), a significant main effect was indicated. Thus, hypothesis one was at least partially supported.

**TABLE 1**

Means, Standard Deviations, Correlations, and Reliabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>1 OCBO</td>
<td>4.45</td>
<td>0.61</td>
<td>(.92)</td>
<td></td>
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<tr>
<td>2 Proactive Personality</td>
<td>3.56</td>
<td>.49</td>
<td>.13*</td>
<td>(.73)</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>3 Autonomy</td>
<td>3.55</td>
<td>.96</td>
<td>.25**</td>
<td>.35**</td>
<td>(.84)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4 Meaning</td>
<td>4.11</td>
<td>.82</td>
<td>.16*</td>
<td>.32**</td>
<td>.36**</td>
<td>(.96)</td>
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<td>5 Gender</td>
<td>–</td>
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<td>.10</td>
<td>-.14*</td>
<td>-.14*</td>
<td>-.05</td>
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<td>6 Race</td>
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<td>-.01</td>
<td>-.05</td>
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<td>7 Age</td>
<td>41.75</td>
<td>12.17</td>
<td>.10</td>
<td>-.18*</td>
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<tr>
<td>8 Education</td>
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<td>–</td>
<td>.08</td>
<td>.14*</td>
<td>.11</td>
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*Note. N = 178. Numbers in parentheses are alpha coefficient reliabilities. *p < .05; **p < .01.*

Hypothesis 2 posited that the relationship between proactive personality and OCBO is moderated by autonomy, such that the positive relationship is strongest when autonomy is highest. The results in Table 2 show that for this sample a significant interaction effect exists. Following Stone & Hollenbeck (1989) OCBO was plotted at high (+1SD) and low (-1SD) levels of proactive personality and autonomy. Figure 1 displays the interaction plot. A simple slope test was then conducted to verify if the slopes of the lines contained in the interaction plot were significantly different than zero. This analysis indicated the relationship between proactive personality and OCBO was significantly different for individuals perceiving high verses low autonomy (t = 3.18, p< .05). Thus, Hypothesis 2 was supported.
Hypothesis 3 posited that the relationship between proactive personality and OCBO is moderated by meaning, such that the positive relationship is strongest when meaning is highest. The results in Table 2 show that for this sample significant interaction effects exist. The results were then plotted to determine whether the interaction was consistent with our hypothesis. Again, OCBO was plotted at high (+1SD) and low (-1SD) levels of proactive personality and meaning and the interaction plot is displayed in Figure 2. A simple slope test was then conducted to verify if the slopes of the lines contained in the interaction plot were significantly different than zero. This analysis indicated the relationship between proactive personality and OCBO was significantly different for individuals perceiving high verses low meaning ($t = 3.42, p < .05$). Thus, Hypothesis 3 was supported.
DISCUSSION

This study sought to assess the extent to which job characteristics (viz., autonomy and meaning) moderate the relationship between proactive personality and OCBO. Given the organizational nature of the hypothesized moderators, it was logical to expect extra role behaviors targeted at
the organization would be affected. Results from the present study supported this argument. When individuals high in proactive personality perceived higher levels of both job meaning and autonomy, the relationship between OCBOs and proactive personality strengthened. Accordingly, we have provided further support for Fuller et al.’s (2010) findings in terms of autonomy. However, we went further, and found that even in low meaning situations individuals with high proactivity will still be willing to perform OCBs.

Likewise, this study sought to further evaluate the extent to which proactive personality was a strong personality trait. Tett & Burnett (2003) noted that further understanding of situational moderators of the personality – performance relationship was necessary if we are to fully understand this relationship (Fuller et al., 2010). In doing so, we found that proactive personality is a fairly strong personality trait. Even if individuals do not find a situation meaningful, they still performed OCBs. This indicates that at least, in terms of meaning, proactivity has been shown to be relatively free of situational modifiers. However, we concur with Fuller and colleagues that for those in situations when autonomy is low, even for discretionary or non-role behavior, proactive personality does not lend itself to being a strong trait. It is possible that a lack of autonomy may preclude any behavior that is not been specified by management. Further research is required in this regard. One particular issue to note is that the job modifier of autonomy leads to higher levels of pro-social behaviors directed at the firm. It would appear that proactive personality is, in some ways, influenced by situational cues. This indicates that proactive personality is moderated by situational aspects, which in turn provides further evidence for Fuller et al. (2010).

This manuscript sought to examine whether proactive personality was a strong or weak personality trait and how it is influenced by environmental factors. The selection of OCBO as a dependent variable was twofold. First, organizational moderators (autonomy and meaning) should influence organizational outcomes (OCBO), rather than individual outcomes. Second, whereas examining focal performance may present biased results, the use of extra role performance does not. Extra roles are proactive in nature. However, a potential issue here is that the organizational modifier strengthened the relationship with the trait and an organizational outcome.

Results reinforce previous findings that for selection and classification to be maximized, personality traits should be matched to situations. In other words, if organizations wish to have proactive behaviors, they must provide proactive people with the resources and discretion to act (Frese et al., 1996). Proactive personality alone is not enough to ensure proactive behaviors, whether they are innovative in nature or pro-social. Therefore, for firms to develop proactive behaviors they need to hire workers who are highly proactive, place them in autonomous jobs, and provide them the necessary resources to be successful. Therefore, we urge managers to use personality-oriented job analysis when hiring and promoting workers.

**Limitations and directions for future research**

There are several limitations to our study. First, no experimental design was employed and thus no casual conclusions should be drawn. Second, our use of a diverse sample consisting of many
types of jobs and organizations may have produced other biases. For example, only individuals with strong relationships with their supervisor may have completed the survey. It is also possible that our survey was so broad that for different careers or organizations the relationship may be different. In addition, our examination of OCBO precluded other situational modifiers such as personal relationships. Future research should analyze whether personal interdependence or relationships with the supervisor or coworker has any effect on the performance of OCBI. It is possible that a proactive person may not perform OCBI for a supervisor they dislike, but may perform other types of behaviors, such as various types of workplace deviance. Because participation rates were lower than 100% (viz., 57%), some sections of the population may not have been sampled. Further replication is needed to solve some of these research and theoretical issues.

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PERSON-ORGANIZATION FORGIVENESS MOTIVE FIT:
THRIVING WITH CONGRUENCE AND FEIGNING WITHOUT

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ABSTRACT

This paper employs person-environment fit theory (Edwards, Caplan, & Harrison, 1998) to develop a framework that examines the congruence between the individual and the organization in terms of forgiveness motive. We conceptually explore the ramifications of having compatibility between the person’s forgiveness motive and the organization’s forgiveness climate. We suggest that individuals can have a dispositional tendency to engage in either other-oriented forgiveness or self-interested forgiveness while also asserting that organizations can have a climate that encourages other-oriented or self-interested forgiveness. We propose that having person-organization forgiveness motive fit is a key factor in shaping the manner in which individuals react to workplace offenses— Influencing whether individuals thrive or feign.

Person-environment fit scholars have examined the extent to which an individual fits within his or her external environment in a variety of ways (Cable & Judge, 1996; Edwards, Cable, Williamson, Lambert, & Shipp, 2006; Kristof, 1996). Researchers have noted that different conceptualizations of fit tap into different psychological processes employed by the individual (Edwards et al., 1998; Kristof, 1996). We propose that congruence between the individual’s motive for forgiveness and the organizational norms surrounding the granting of forgiveness is an essential aspect of understanding individual behavior and the broader organizational context. This is especially true since organizational members will inevitably commit workplace offenses—thereby fostering ample opportunities to contemplate granting forgiveness. In fact, imperfect interactions in the workplace are “part and parcel of organizational life” (Ren & Gray, 2009: 105).

As individuals contemplate how to respond to workplace offenses, their thoughts, feelings, and behaviors will be influenced by dispositional and contextual factors. In this paper, we propose that the extent to which the person perceives him or herself to have congruent values with the organization with regard to the appropriate forgiveness motive will induce positive intrapersonal and interpersonal outcomes. We suggest that those whose forgiveness motives coincide with the organizational norm for resolving conflict will have person-organization forgiveness motive fit. Scholars have discovered that the nature of the organizational climate in which offenses occur can influence how individuals respond to offenses (Cox, 2008). Although organizational scholars have examined the interaction between the person and environment in many ways (e.g. Chatman, 1989; Fiedler, 1976; Hackman & Oldham, 1980; Holland, 1985; Lewin, 1951; Moos, 1973;
Schneider, 1983, 1987; Terborg, 1981), an examination of the interaction between individual differences and organizational climate has not occurred in the context of workplace forgiveness. In examining the congruence between the individual and organization vis-à-vis forgiveness motive, this conceptual presentation contributes to the extant literature in three ways.

First, we distinguish between two distinct organizational forgiveness climates. Extant research conceptualizes and empirically examines organizational forgiveness climate (Cox, 2008). However, current research assumes that forgiveness is intrinsically associated with empathy and compassion. In fact, much of the past research contends that if forgiveness occurs, it is primarily due to empathy and compassion (McCullough, Rachal, Sandage, Worthington, Brown, & Hight, 1998; McCullough, Worthington, & Rachal, 1997). However, recent conceptual work (see Bright, Fry, Cooperrider, 2008) as well as empirical examinations (Thompson, 2010) revealed that there are two discrete types of forgiveness. This research demonstrated that individuals may be more self-interested and calculating in their forgiveness, or they may be more other-interested and compassionate. Bright and colleagues (2008) classified responses to interpersonal transgressions and found that individuals who forgive do not always do so because of empathy for others. Rather, they found that individuals who forgive might do so because they are calculating and self-interested. Transcendent forgiveness refers to when individuals are empathetic, compassionate, and even altruistic in considering whether to grant forgiveness (Bright et al., 2008; Enright, Gassin, & Wu, 1992; Thompson, 2010). Pragmatic forgiveness refers to when individuals are calculating and self-interested in considering whether to grant forgiveness (Bright et al., 2008; Thompson, 2010).

Just as individuals may be more self-interested or other-interested in their interpersonal forgiveness, we suggest that organizational climates may foster self-interested or other-interested forgiveness. This distinction is critical because if scholars inaccurately assume that forgiveness must be associated with compassion and other-interests, then they may not recognize instances of forgiveness that may be more self-interested. Both types of organizational forgiveness climates can lead to desirable outcomes. Such outcomes are contingent upon the fit between the person’s disposition and organizational forgiveness climate. For some individuals (i.e. self-interested individuals) an organizational climate for pragmatic forgiveness may lead to positive outcomes; whereas, for other individuals (i.e. other-oriented individuals) an organizational climate for transcendent forgiveness may lead to positive outcomes. Herein, we intend to better conceptualize organizational situations pertaining to the interaction between the person and situation (cf. Chatman, 1989; Moos, 1973).

Second, we develop a typology of person-organization congruence in the context of workplace forgiveness. We propose a conceptual framework by introducing a typology comprised of dispositional components (i.e. self-interest and other-orientation) as well as perceived organizational climate components (i.e. pragmatic organizational forgiveness climate and transcendent organizational forgiveness climate) (see Bright et al., 2008; Cox, 2008). The first quadrant is congruent concern for self. This quadrant refers to when the individual has a self-interested disposition and works in a pragmatic climate. The second quadrant pertains to incongruent concern for self, and refers to when the individual has a self-interested disposition, but works in a transcendent climate. Congruent concern for others is the third quadrant and refers
to when the individual has an other-oriented disposition and works in a transcendent climate. The last quadrant is incongruent concern for others and refers to when the individual has an other-oriented disposition, but works in a pragmatic climate. Thus, when disposition is compatible with the organization’s climate (i.e. good fit), the quadrants are congruent; whereas, when disposition is incompatible with the organization’s climate (i.e. poor fit), the quadrants are incongruent (cf. Kristof, 1996).

Third, we propose that the four categories of the framework lead to varying levels of learning and vitality (see Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005) while also resulting in different intrapersonal and interpersonal forgiveness outcomes as well as disparate motivations for, and expressions of, organizational citizenship behaviors (cf. Organ, 1990). When there is a congruent concern for self, we suggest that individuals are more likely to experience higher levels of learning and vitality (i.e. thriving), engage in interpersonal pragmatic forgiveness, and feel and express conscientiousness-based organizational citizenship behaviors (cf. Bolino, 1999). When there is an incongruent concern for self, individuals are more likely to experience higher levels of learning but lower levels of vitality, engage in intrapersonal pragmatic forgiveness, and feign altruism-based organizational citizenship behaviors. When there is a congruent concern for others, individuals are more likely to experience higher levels of learning and vitality, engage in interpersonal transcendent forgiveness, and feel and express altruism-based organizational citizenship behaviors. When there is an incongruent concern for others, individuals are more likely to experience higher levels of learning but lower levels of vitality, engage in intrapersonal transcendent forgiveness, and feign conscientiousness-based organizational citizenship behaviors.

SUMMARY

In this paper, we have developed a conceptual framework of person-organization forgiveness motive fit by conceptually examining the individual in tandem with the organizational climate. We have proposed a typology comprised of other-oriented disposition on one end of the spectrum and self-interested disposition on the other; whereas, transcendent forgiveness and pragmatic forgiveness comprise the spectrum pertaining to organizational climate. These two spectra converge to form a typology, which describes congruent concern for self, incongruent concern for self, congruent concern for others, and incongruent concern for others, respectively. These four types of person-organization forgiveness motive fit lead to various individual outcomes thereby influencing whether an individual thrives or not in the workplace. In addition to the practical ramifications of this paper, it is our hope that this paper will serve as a springboard for future empirical research.
REFERENCES


COPING MECHANISMS AS ANTECEDENTS OF JUSTICE AND OCB: A MULTIFOCAL PERSPECTIVE OF THE SOCIAL EXCHANGE RELATIONSHIP

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ABSTRACT

The social exchange principles of reciprocity and rationality are used to examine approach and avoidance coping styles in the context of a natural disaster as antecedents of justice and organizational citizenship behavior (OCB). Results suggest that individuals engaging in an approach coping style after a natural disaster are more likely to have higher perceptions of justice and are more likely to engage in OCB than individuals engaging in an avoidance coping style. Results also indicate that individual coping style influences both individual and organizational level variables, suggesting a multi-focal perspective of social exchange may be appropriate in future theory development.

INTRODUCTION

Natural disasters create special problems for organizations trying to continue business as usual. Employees often need to work despite the disaster, but they may be unable to work due to power outages, blocked roads, or excessive damage to their home or workplace. In these stressful situations, individual coping mechanisms may alter the manner in which individuals perceive organizational justice and support or may cause employee organizational citizenship behaviors to change. It is possible that organizations may use the situation of a natural disaster to demonstrate how the organization cares about the well-being of its employees by training them to engage in certain types of coping behaviors, so that they can better deal with the effects of the disaster. The purpose of this study is to use the reciprocity and rationality principles in social exchange theory to examine the relationships between individual coping mechanisms, organizational justice, perceived organizational support, and organizational citizenship behavior. The model presented is a multifocal perspective of the social exchange relationship that includes both individual and organizational level variables.

THEORETICAL BACKGROUND

Social exchange theory (Blau, 1964) refers to personal interactions of two or more parties such that the action of one party is contingent upon the action of the other party, and it has been used extensively in the research literature to explain phenomenon such as perceived organizational support (Cropanzano & Mitchell, 2005; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002) and organizational citizenship behavior (see Moorman & Byrne, 2005, for a review) by focusing on the act of reciprocity between an organization and an employee. The rule of reciprocity assumes that there is a general, or societal, norm of reciprocity, such that when Person A helps Person B, then Person B is required to help Person A or at least not harm Person A. Rationality, on the other
hand, suggests individuals are rational beings who behave in rational ways and will make decisions that maximize both parties’ rewards when the two parties in the exchange relationship are working toward the same goal (cooperative goal structure), but will make decisions that maximize his own rewards at the expense of the other party when they have conflicting goals.

Many studies rely primarily on the reciprocity norm in social exchange theory as the basis for hypothesis development (Moorman & Byrne, 2005), but this limited use of social exchange theory has been questioned. Indeed, Cropanzano and Mitchell (2005) assert that neglected components of social exchange theory should be used in an effort to help clarify organizational behavior at different levels of exchange. Therefore, we use Meeker’s (1971) social exchange principles of reciprocity and rationality to develop hypotheses concerning the relationship between individual coping mechanisms, organizational justice, perceived organizational support, and organizational citizenship behavior in the context of a natural disaster. The model to be tested is presented in Figure 1, and the development of hypotheses follows the model.

**FIGURE 1**

Hypothesized Model

Approach Coping Style

- Justice
  - Interpersonal
  - Informational

Perceived Org Support

OCBO

OCBI

Avoidance Coping Style

Coping mechanisms

The manner in which individuals cope with stress has been a subject of interest for some time, with many researchers focusing on the different styles of coping. For example, Roth and Cohen (1986) describe two general categories of coping responses. One is a strategy of approaching and confronting the problem (approach coping) while the other is a strategy of avoiding dealing directly with the problem (avoidance coping). The coping mechanism chosen by the individual depends in large part upon the individual’s appraisal of the situation. If the appraisal indicates something can be done about the situation, approach coping is dominant. If the appraisal indicates nothing can be done about the situation, avoidance coping is dominant (Lazarus, 1993). Generally speaking, greater approach coping is associated with better psychological outcomes while greater avoidance coping is associated with poorer psychological outcomes (Holahan & Moos, 1990; 1991; Vitaliano, Maiuro, & Russo, 1987).

We believe the individual’s choice of coping mechanism after a natural disaster may impact perceptions of justice and OCB. After a powerful storm, individuals may struggle with numerous
personal problems (damaged property, insurance claims, loss of power supply) that cannot be totally compartmentalized from work. In 2008, for example, power outages in the Houston area after Hurricane Ike lasted as long as three weeks in some places, with many areas going at least seven days without power. Individuals trying to return to work were constantly reminded of the damage, both at work and at home; thus, everyone was forced to confront the situation. The way in which individuals coped with the disaster, however, could significantly impact the individual’s attitudes and behavior toward work. We believe there will be a positive relationship between an approach coping style and perceptions of justice and OCB, but there will be a negative relationship between an avoidance coping style and perceptions of justice and OCB.

This belief is based on the premise that individuals who normally handle a stressful situation with an approach coping style are more likely to go out of their way to get support and resources from their boss to deal with the problem at hand. Therefore, they get more of the resources and feel like they are being treated justly. As a result, the individual is likely to utilize the rationality principle as described in social exchange theory and act accordingly by reciprocating through supportive employee behavior (OCB). Indeed, Meeker (1971) suggests several exchange principles could operate at once in an exchange. The rationality principle is an exchange rule suggesting employees will make decisions that maximize their rewards in an exchange relationship (Meeker, 1971). Individuals with an approach coping style will take action after a natural disaster to get what they need from their employer (maximize their rewards in the relationship), but these employees will not take advantage of the employer because doing so could potentially hurt them in the future, causing them to lose any positive benefits from the relationship (minimize their rewards). Thus, the principle of rationality and the norm of reciprocity are working at the same time, and employees are likely to engage in positive behavior (OCB) as a result of getting what they need during the disaster and to maintain the rewarding exchange relationship. In this situation, the principle of rationality and reciprocity are mutually consistent because they both predict choosing the same alternative. In addition, the goals of the employee and the employer in this instance are congruent (common) in that the employee wants to solve the problem and get back to work, while the employer wants the employee to solve the problem and get back to work.

H1: There is a positive relationship between an approach coping style used after a natural disaster and perceptions of organizational justice.

H2: There is a positive relationship between an approach coping used after a natural disaster and organizational citizenship behavior.

In contrast, individuals who normally handle a stressful situation with an avoidance coping style are more likely to “zone out”, “explode”, or do anything they can to avoid dealing with the issue. Thus, these individuals are less likely to approach their boss to get the support and resources they need, and as a result may feel they are being treated unjustly. The feeling of injustice may be exacerbated by seeing employees with an approach coping style using organizational resources to solve their problems, especially if the individual with an avoidance coping style is waiting for the organization to help. The rationality principle of maximizing rewards is not being utilized in the exchange relationship for the person with an avoidance coping style because the person is not
taking the initiative in using the resources available to them. This perceived lack of justice, however, may trigger the rule of reciprocity such that the employee who receives less help reciprocates by not engaging in helping behaviors toward the organization in the form of OCB. In this situation, the employee and the employer have conflicting goals such that the employee wants to avoid dealing with the problem while the employer wants the employee to solve the problem and get back to work. Despite the conflicting goals, the principle of rationality and reciprocity are mutually consistent because they both predict choosing the same alternative.

H3: There is a negative relationship between an avoidance coping style used after a natural disaster and perceptions of organizational justice.

H4: There is a negative relationship between an avoidance coping style used after a natural disaster and organizational citizenship behavior.

**Organizational justice**

Organizational justice research has evolved over several years from a primary focus on decision outcomes (distributive justice) to include perceptions of the decision process (procedural justice) and perceptions of personal treatment in the implementation of the decision process (interpersonal and informational justice). The various types of organizational justice have allowed researchers to further understand how employees respond to situations in the workplace (see Colquitt, Greenberg, & Zapata-Phelan, 2005, for a review of the types of justice).

One of the results of classifying organizational justice into subcomponents has been to focus on which type of justice best explains certain resulting behaviors. The multifocal perspective of justice suggests that justice perceptions can best be understood based on the source of justice dispensation which then impacts the related behavior toward a relevant party. For example, some researchers propose that justice is viewed as related either to the system (organization) or to an agent (the person responsible for implementing the decision). This idea is the basis for the two-factor, agent-system perspective on justice (Tyler & Bies, 1990).

Many researchers have examined some form of the agent-system perspective of justice (Karriker & Williams, 2009; Lavelle, Rupp, & Brockner, 2007; Liao & Rupp, 2005; Masterson, Lewis, Goldman, & Taylor, 2000; Rupp & Cropanzano, 2002). For example, Lavelle, et al.’s target similarity model combines organizational-level variables such as organizational justice, perceived organizational support, organizational commitment and citizenship toward the organization into one social exchange relationship, and combines individual-level variables such as coworker justice, perceived team support, coworker commitment, and citizenship toward coworkers into a separate social exchange relationship. Likewise, Karriker and Williams (2009) separate organizational-level justice (system-referenced justice) and the resulting organizational-directed outcomes from agent-referenced justice (individual-level justice) and the resulting agent-related outcomes.

Although the agent-system perspective of justice shows strong ties between variables at the same level (i.e., organization to organization or person to person), the models also suggest the
cognitive processing of justice perceptions can occur at different levels such as supervisor to organization or coworker to supervisor (Lavelle, et al., 2007; Karriker & Williams, 2009). Indeed, before the development of the multifocal approach, many justice studies routinely combined organization-level perceptions with individual-level perceptions. The multifocal perspective does not condemn the combination of organization-level variables with individual-level variables, it simply suggests justice perceptions can best be understood when the source of the justice dispensation and the resulting outcomes are acknowledged and explained.

The multifocal perspective has thus set the stage for an expanded model in which we acknowledge the respective levels of justice perspectives and examine how individual level justice perceptions impact organizational level attitudes. In a natural disaster context, informational justice and interpersonal justice seem to be the most relevant in combining individual justice perceptions with attitudes directed toward the organization. Information is a precious resource during a disaster, and individuals who want to maximize their rewards in the employee-employer exchange relationship should recognize the value of information and respectful treatment dispensed in an environment of utter chaos. This recognition of value should be correlated to perceptions of organizational support since high levels of interpersonal and informational justice suggests that the employer cares about an employee’s well-being.

**Perceived organizational support**

Perceived organizational support (POS) is the belief that organizations care about their employees’ well-being and value their contributions (Eisenberger, et al., 1986). Several studies have found that perceptions of fairness and justice are antecedents of POS (Lavelle, McMahan, & Harris, 2009; Loi, Hang-yue, & Foley, 2006; Rhoades & Eisenberger, 2002). The most common explanation for this finding is grounded in social exchange theory, and is based on the idea that there is a tradeoff between employee effort and organizational rewards (Lavelle, et al., 2009; Loi, et al., 2006; Wayne, Shore, Bommer & Tetrick, 2002). When the organization rewards an employee fairly, the employee views the organization as an entity that values their contributions. When the organization makes every effort to help employees in a given situation, the employee views the organization as an entity that is concerned for their well-being.

Some of the consequences of POS include an impact on organizational commitment (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Rhoades & Eisenberger, 2002; Shore & Tetrick, 1991), a decrease in turnover intentions (DeConinck & Johnson, 2009; Loi, et al., 2006) and an impact on organizational citizenship behavior (Lavelle, et al., 2009; Moorman, Blakely & Niehoff, 1998; Wayne, et al., 2002).

Like organizational justice, perceived organizational support has also been studied from a multi-focus perspective, with researchers breaking the support construct into different levels of analysis. At the organizational level, the construct measures perceived support of the overall organization. Researchers have also identified and measured perceived support at the group level (Lavelle, et al., 2009; Lavelle, et al., 2007) and at the individual level as perceived supervisor support (DeConinck & Johnson, 2009; Lavelle, et al., 2009; Rhoades & Eisenberger, 2002; Stinglhamber, DeCremer & Merckens, 2006).
Acknowledging the different levels of analysis, we examine the relationship between justice and POS and hypothesize a positive relationship between the variables. Although some researchers categorize supervisor-referenced justice as an individual-level variable (Kottke & Sharafinski, 1988), other researchers suggest employees consider supervisors as agents of the organization and believe supervisors act on behalf of the organization (Eisenberger, et al., 1986; Eisenberger, et al., 2002). Thus, we combine supervisor-referenced justice with organizational level support. The supervisor is most likely the main point of contact for employees in a natural disaster context. Since some disasters can be predicted in advance, organizations are likely to disseminate information through the formal chain of communication which means informational justice and interpersonal justice perceptions of the organization are transmitted through the actions of the organization’s designated agent, the employee’s supervisor. Employees who perceive high levels of informational and interpersonal justice in a natural disaster context are likely to recognize the employer’s effort to keep them informed as a positive action. As a result, employees are likely to reciprocate by engaging in positive actions toward the employer as predicted by the social exchange principal of reciprocity.

H5: There is a positive relationship between perceptions of organizational justice and perceptions of organizational support.

Organizational citizenship behavior

Organizational citizenship behavior (OCB) is defined as “…individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization…” (Organ, 1988, p. 4). Many types of OCB have been identified in the literature, with almost 30 different types categorized into seven main dimensions (see Podsakoff, MacKenzie, Paine, & Bachrach, 2000, for a review). In an attempt to clarify the antecedents and consequences of OCB, a multi focus analytical approach further classifies OCB into two broad categories consisting of behavior directed primarily towards individuals, OCBI, and behavior directed primarily towards the organization, OCBO (McNeely & Meglino, 1994; Williams & Anderson, 1991). An example of the multi focus perspective is the study by Allen (2006). Allen (2006) found a connection between OCBO and increased promotions, but not between OCBI and increased promotions, suggesting that behaviors directed toward the organization result in organizational-level consequences, but behaviors directed toward individuals do not result in organizational-level consequences. Supporting this view is a separate study which found a stronger relationship between POS and OCBO, two organizational level variables, than between POS and OCBI, one organizational level variable and one individual level variable (Kaufman, Stamper, & Tesluk, 2001).

Some researchers, however, have suggested that OCB should be treated as a context-related phenomenon since specific situations or organizational culture may encourage exchange relationships at both the individual and organizational level (Somech & Drach-Zahavy, 2004). Studies that have found multi-level effects support this view. For example, Skarlicki & Latham (1996, 1997) found that training union leaders in organizational justice principles, which encompass both individual level and organizational level exchanges, increased both OCBI and
OCBO. Aryee and Chay (2001), also working in a union setting, found the organizational level variables of perceived union support and union instrumentality acted as antecedents of both OCBO and OCBI. Somech and Drach-Zahavy (2004) found that organizational learning, clearly an organizational level endeavor, was related to both OCBI and OCBO.

We propose the context-related approach to OCB is appropriate for the present study. The study context is the aftermath of a natural disaster in which both organizational level and individual level exchanges are likely to occur since there is a need to organize and coordinate people in the midst of confusion. Typical communication channels may not be functional, and therefore, the exchange relationships that normally require a particular chain of command become moot. In such a chaotic situation, individuals who believe the organization cares about their well-being are likely to engage in positive behaviors toward the organization as predicted by the norm of reciprocity. As perceived organizational support increases, employees are likely to respond in kind by engaging in OCBs. This premise is based on the reciprocity norm of social exchange theory such that when an agent of the organization treats an employee with respect, the employee reciprocates by engaging in positive behavior toward the agent and the organization.

From a rationality perspective, employees and employers have the common goal of bringing the workplace back to normal. Employees need the employer to open so they can work and earn money, while the employer needs employees to help open the business to earn money. The common goal should create a situation in which both parties in the exchange decide to maximize their rewards by helping one another. Employees are likely to consider any type of concern for well-being as organizational support if it comes from an organizational source, particularly if the typical chain of command is broken in the aftermath of the disaster. For example, a coworker assigned to call and check on employees after a disaster is obviously connected to the employer, and by default, the coworker represents the employer. Thus, POS at any level—supervisor, coworker, or organization—may result in increased OCBs directed toward both individuals and the organization as a whole. The principle of rationality and reciprocity are mutually consistent in this situation because they both predict choosing the same alternative.

H6: There is a positive relationship between perceived organizational support after a natural disaster and organizational citizenship behavior (OCBI and OCBO).

**METHOD**

**Sample**

Subjects for the study were recruited by students returning to school in the Southwestern US after Hurricane Ike. Students in management classes were given an opportunity to receive extra credit by asking a full-time employee over the age of 30 to complete a series of three surveys about the recent hurricane and their experience in returning to work after the hurricane. Snowball data collection has been used frequently by researchers in recent years (Eaton & Struthers, 2002; Jandeska and Kraimer, 2005; Rotondo, Carlson & Kincaid, 2003; Treadway, Hochwarter, Kacmar & Ferris, 2005). In a study of hurricane-induced stress, Hochwarter, Laird and Brouer (2008) collected data in one sample by giving undergraduate students course credit for distributing five surveys to full-time employees, similar to our method of asking students.
after a hurricane to distribute surveys to full time employees over the age of thirty. Because we wished to measure employee attitudes within four weeks of the hurricane, a snowball sample allowed us to meet this deadline. The four week time period was to ensure that memories of the hurricane and its aftermath were not diminished. Indeed, many people in a large area surrounding the school were still without power and running water several weeks after the storm.

The cover sheet to the survey was entitled, “Employee reactions to Hurricane Ike,” and the cover sheet stated that the purpose of the survey was to learn about individual experiences in returning to work after Hurricane Ike. Participants were, thus, given the appropriate frame of reference for their responses. The thirty year age requirement was to ensure that respondents were more likely to have a vested interest in property such as houses or cars, and more likely to have experienced personal hardship in terms of work loss and property damage. These issues would make workplace variables such as organizational justice, POS and OCB more likely to be impacted by coping mechanisms after a natural disaster. Younger respondents, such as college students, would be less likely to experience personal hardship in the same way since many hold temporary jobs to which they are not fully committed for the long-term.

Hurricane Ike made landfall in the US on September 13, 2008, and classes resumed at the university on September 22, 2008. The data for the present study are from the first survey which was distributed and completed between October 2 and October 9. There were 255 respondents with a mean age of 43.3 who worked an average of 45.3 hours per week. Approximately 52% of the sample respondents were male and 48% were female. About 55% of the respondents had a college degree or a graduate degree, 33% had some college, and 11% had a high school diploma. The sample was approximately 74% White, 10% Black, 9% Hispanic, and 7% other. About 30% were paid on an hourly basis while 70% were paid on a salary basis.

**Measures**

All variables were measured using either a 7-point Likert scale or a 5-point Likert scale. For the perceived organizational support scale, items asked how strongly respondents agreed with statements measuring perceived organizational support, with 1 = strongly disagree and 7 = strongly agree. For the organizational behavior scales and the coping scales, the items asked how often respondents engaged in certain behavior or how often they reacted a certain way to stress episodes. For these two scales, 1 = never and 7 = always. The justice scales asked respondents to what extent supervisors engaged in certain behaviors. Following the example of Colquitt (2001), these items used a 5-point scale with 1 = to a very small extent and 5 = to a very large extent.

Perceived organizational support (POS). Nine items were used to measure POS ($\alpha = .92$), with the items taken from Eisenberger, et al. (1986). The nine items were chosen to ensure that both facets of POS, valuation of employee contribution and care about employee well-being, were represented. Sample items include, “The organization values my contribution,” and “The organization shows very little concern for me (R).”

Organizational citizenship behavior (OCB). Sixteen items were used to measure OCB, with eight items representing OCB directed toward the individual (OCBI) and eight items representing
OCB directed toward the organization (OCBO). These items were taken from Lee and Allen’s (2002) scale, and reliability measures were acceptable (α = .89 for OCBI and α = .92 for OCBO).

Justice. The items for interpersonal justice and informational justice were taken from Colquitt’s (2001) scale. Interpersonal justice was measured with four items (α = .89), and informational justice was measured with five items (α = .89). Sample items include, “To what extent does your supervisor treat you in a polite manner” (interpersonal justice), and “To what extent does your supervisor explain work procedures thoroughly at work” (informational justice).

Coping response. Items measuring coping response strategies were taken from the coping response inventory (Moos, 1990). For approach coping strategies, we used the positive reappraisal and problem solving subscales. For avoidance coping strategies, we used the cognitive avoidance and emotional discharge subscales. These four subscales were used by Valentiner, Holahan, & Moos (1994) as representatives of approach and avoidance coping; thus, we follow their example and do the same in the present study. Each subscale consisted of 6 items, and sample items include the following: “Try not to think about the problem” (cognitive avoidance); “Yell or shout to let off steam” (emotional discharge); “Make a plan of action and follow it” (problem solving); and “Try to see the good side of the situation” (positive reappraisal). The cognitive avoidance and emotional discharge scales were added together to get one score for the avoidance coping scale (α = .84), and the problem solving and positive reappraisal scales were added together to get one score for the approach coping scale (α = .85).

RESULTS

The data were analyzed using PLS Graph Version 3.0 (Chin, 2001), a structural modeling technique that uses partial least squares (PLS) to test relationships between constructs. In many justice studies, constructs tend to be highly correlated because they often represent cognitive perceptions that are quite similar. For example, interpersonal justice and informational justice should be highly correlated, as should perceived organizational support and perceptions of justice. These constructs have been found to have discriminant validity, but the correlation between them is still quite robust as seen in Table 1. When the data are highly correlated, the regression coefficients produced using ordinary least squares regression tend to be unstable and inflated (Cohen, Cohen, West & Aiken, 2003, p. 419). PLS uses a nonlinear iterative partial least squares algorithm (NIPALS) that reduces the collinearity problem (Geladi & Kowalsi, 1986). PLS is generally recommended as an appropriate means of analysis for small sample sizes used for theory development, but other techniques may be more appropriate for testing large sample sizes in a confirmatory sense (see Sosik, et al., 2009, for a more detailed explanation). Because we are developing a new theoretical model in which coping mechanisms are linked to justice constructs, and because the independent constructs of interest tend to be highly correlated, we believe PLS is the appropriate analysis to use for testing the hypothesized model.

To assess the measurement model using PLS analysis, it is necessary for the indicator items to load on the appropriate factor and to ensure that composite scale reliability and average variance extracted for each construct are sound. Composite scale reliability is an internal consistency
estimate similar to Cronbach’s alpha (Kahai et al., 2004), and average variance extracted (AVE) is obtained by the sum of loadings squared and divided by the number of items in the construct (Croteau & Bergeron, 2001, p. 87). An appropriate measurement model will have item factor loadings of .60 or higher and composite scale reliability estimates of .80 or higher. In addition, AVE must be higher than all the variances shared between two constructs (Fornell & Larcker, 1981). Because the variance shared between two constructs corresponds to the square of the coefficient of correlation (Croteau & Bergeron, 2001, p. 87), we take the square root of the AVE and compare it to the shared variance with other constructs (Sosik, et al., 2009) to examine whether the AVE is greater than all variances shared between two constructs. Table 1 shows the composite scale reliabilities are all higher than .80 and the AVE is higher than all variances shared between two constructs, while Table 2 shows that all item loadings exceed .60. These results indicate the measures represent discriminant constructs and that the measurement model is appropriate.

The results of the structural model shown in Figure 2 list all path coefficients and R² values. The first hypothesis states there is a positive relationship between an approach coping style after a natural disaster and perceptions of organizational justice. This hypothesis was supported for interpersonal justice (b = .353, t = 4.79) and for informational justice (b = .382, t = 6.19). The second hypothesis states there is a positive relationship between an approach coping style after a natural disaster and organizational citizenship behavior. This hypothesis was supported for both OCBI (b = .319, t = 4.79) and for OCBO (b = .28, t = 6.26). Hypotheses three and four examine the relationship between an avoidance coping style after a natural disaster and perceptions of organizational justice and organizational citizenship behavior. These hypotheses were generally not supported. The relationship between avoidance coping and interpersonal justice was not significant (b = -.018, t = .26) nor was the relationship between avoidance coping and informational justice (b = .065, t = .97). In addition, avoidance coping had no significant relationship to OCBO (b = -.134, t = 2.46), but a marginally significant relationship to OCBI (b = -.174, t = 2.99).
### Table 1
Means, Standard Deviations, Alphas, and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th># of items</th>
<th>M</th>
<th>SD</th>
<th>α</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. Approach Coping</td>
<td>7</td>
<td>5.15</td>
<td>.92</td>
<td>.85</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Avoidance Coping</td>
<td>7</td>
<td>2.87</td>
<td>1.00</td>
<td>.81</td>
<td>-.29</td>
<td>(.69)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Interpersonal Justice</td>
<td>4</td>
<td>4.11</td>
<td>.86</td>
<td>.89</td>
<td>.36</td>
<td>(.36)</td>
<td>-.14</td>
<td>(.88)</td>
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<td></td>
</tr>
<tr>
<td>4. Informational Justice</td>
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<td>3.71</td>
<td>.90</td>
<td>.89</td>
<td>.36</td>
<td>(.36)</td>
<td>-.06</td>
<td>(.72)</td>
<td>.72</td>
<td>(.83)</td>
<td></td>
</tr>
<tr>
<td>5. Perceived Org Support</td>
<td>8</td>
<td>5.18</td>
<td>1.25</td>
<td>.92</td>
<td>.41</td>
<td>(.42)</td>
<td>-.16</td>
<td>(.49)</td>
<td>.48</td>
<td>(.54)</td>
<td>(.83)</td>
</tr>
<tr>
<td>6. OCBO</td>
<td>8</td>
<td>5.33</td>
<td>1.13</td>
<td>.92</td>
<td>.51</td>
<td>(.54)</td>
<td>-.29</td>
<td>(.33)</td>
<td>.32</td>
<td>(.34)</td>
<td>.65</td>
</tr>
<tr>
<td>7. OCBI</td>
<td>8</td>
<td>.05</td>
<td>.95</td>
<td>.89</td>
<td>.43</td>
<td>(.49)</td>
<td>-.26</td>
<td>(.25)</td>
<td>.23</td>
<td>(.25)</td>
<td>.42</td>
</tr>
</tbody>
</table>

Note: The means, standard deviations, alphas, and correlations without parentheses are for scales in which all items are weighted equally. Bolded parentheses along the main diagonal represent the square root of the average variance extracted from the variable by its items during PLS analysis. Correlations within parentheses are between latent variables created by PLS.
### Table 2

Factor Loadings, Composite Scale Reliabilities, and Average Variance Extracted for Multi-indicator Latent Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Weight</th>
<th>Loadings</th>
<th>AVE</th>
<th>Composite Scale Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach Coping</td>
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<td>.24</td>
<td>.79</td>
<td>.54</td>
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<tr>
<td></td>
<td>App 2</td>
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<td></td>
<td>App 3</td>
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<td>.86</td>
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</tr>
<tr>
<td></td>
<td>App 4</td>
<td>.17</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>App 5</td>
<td>.19</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>App 6</td>
<td>.15</td>
<td>.63</td>
<td></td>
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<td></td>
<td>App 7</td>
<td>.13</td>
<td>.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance Coping</td>
<td>Avoid 1</td>
<td>.19</td>
<td>.71</td>
<td>.48</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Avoid 2</td>
<td>.16</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avoid 3</td>
<td>.21</td>
<td>.73</td>
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<td>Avoid 4</td>
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<td></td>
<td>Avoid 7</td>
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<td></td>
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<tr>
<td>Interpersonal Justice</td>
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<td>.90</td>
<td>.77</td>
<td>.93</td>
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<td>IJ 4</td>
<td>.23</td>
<td>.74</td>
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<tr>
<td>Informational Justice</td>
<td>INFJ 1</td>
<td>.22</td>
<td>.73</td>
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<td></td>
<td>INFJ 4</td>
<td>.23</td>
<td>.85</td>
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<td>INFJ 5</td>
<td>.22</td>
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<tr>
<td>Perceived Org Support</td>
<td>POS 1</td>
<td>.17</td>
<td>.85</td>
<td>.68</td>
<td>.94</td>
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<tr>
<td></td>
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</tr>
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<td>POS 5</td>
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<td></td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td></td>
<td>POS 8</td>
<td>.11</td>
<td>.64</td>
<td></td>
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</tr>
</tbody>
</table>

233
The fifth hypothesis states there is a positive relationship between perceptions of organizational justice and perceived organizational support. This was supported for the relationship between informational justice and POS (b = .385, t = 5.62), but was just short of being significant for the relationship between interpersonal justice and POS (b = .211, t = 2.75). The sixth hypothesis examines the relationship between POS and organizational citizenship behavior, and it was supported for both OCBI (b = .277, t = 3.47) and OCBO (b = .512, t = 10.89).

**DISCUSSION**

Social exchange theory, specifically the norm of reciprocity, is used frequently in the justice literature to explain behavioral exchanges in relationships, but other elements (rules) of social exchange theory, such as the principle of rationality, are often overlooked. The present study proposes that both reciprocity and rationality may be used to enhance the theoretical underpinnings of behavior in a justice context. For example, the rationality principle proposes individuals engage in rational behavior that maximizes their rewards. If the two parties in an exchange have mutual or cooperative goals, then the individuals will act in a way that allows both parties in an exchange to benefit. If the two parties in an exchange have conflicting goals, however, the individuals will make decisions to maximize their own rewards at the expense of the other party. This rational behavior combined with the norm of reciprocity allows more comprehensive explanations for individual actions. For example, our study examines coping style and justice in the context of a natural disaster. Using only the norm of reciprocity as the theoretical premise for hypotheses, researchers must assume that individuals will follow social norms without consideration of any personal cost to the reciprocating action. Adding the
principle of rationality to the mix, however, allows researchers to determine if the goals of the two exchange parties are cooperative or conflicting and to develop more complex hypotheses.

Results of this study suggest that individuals engaging in an approach coping style after a natural disaster are more likely to have higher perceptions of organizational justice and are more likely to engage in organizational citizenship behavior than individuals engaging in an avoidance coping style. It is possible that individuals engaging in an approach coping style recognize the need to cooperate with employers after a disaster, thus creating mutual goals between the two exchange parties. Conversely, individuals engaging in an avoidance coping style may be more likely to focus on fulfilling their own needs at the expense of the employer. Although both coping styles represent acting in a rational manner, it is possible that only those individuals engaged in an approach coping style recognize the importance of reciprocation in resolving the problem, while those trying to avoid the problem focus only on protecting themselves.

As with any study, there are limitations that should be considered. The data used in this study were collected at one time period, potentially leading to common method variance that may cause inflated relationships between the constructs. However, past research has already demonstrated that variables such as justice and POS are strongly correlated, but still distinct.
constructs both theoretically and statistically. There is no evidence to suggest the data in this study were particularly unusual to cause concern due to the cross-sectional nature of the data collection. In addition, Doty and Glick (1998) argue the level of bias from common method variance in organizational research is rarely large enough to invalidate study findings.

A separate issue in this study concerns the timing of the data collection. We wanted to measure the variables, specifically coping, at a time when use of the coping skills was particularly salient. Although the damage and daily disruption from the hurricane was still vividly present throughout an area hundreds of miles wide for several weeks, the actual data collection occurred about three weeks after the hurricane made landfall. The three week time lag should have been enough time for respondents to “get their bearings” and react, but it could have too much time in the sense that respondents may have begun to “reconstruct” their reactions to the disaster to reflect a more positive view of themselves. From a self-presentation perspective, it is more socially acceptable to engage in approach coping than avoidance coping. Despite this potential limitation, however, the differences between approach and avoidance coping are clear in the results. Perhaps employers could introduce coping skills training as a practical means of assisting employees in a disaster situation.

Future research should consider including cooperative or conflicting goal structure in the theoretical development of organizational justice along with additional rules from Meeker’s (1971) article on social exchange theory. Many justice theories focus heavily on group-oriented conceptualizations such as the relational model (Tyler & Lind, 1992) or the group engagement model (Tyler & Blader, 2000). The norm of reciprocity is a key premise in these group models in that the social exchange between the group and the individual is based on a cooperative goal structure. However, what happens when there is a conflicting goal structure between the two parties? The principle of rationality predicts a conflicting goal structure will lead to each party trying to maximize their rewards at the cost of the other party. The fairness process effect (Folger, Rosenfield, Grove & Corkran, 1979), which proposes that fair procedures tend to override negative reactions to unfavorable decision outcomes, suddenly becomes invalid under a conflicting goal structure. In addition, the conflicting goal structure could occur at multiple levels, making the multifocal perspective of the social exchange relationship even more important in understanding employee reactions to justice perceptions. Fairness theory (Folger & Cropanzano, 1998) may be one starting point for including conflicting goal structures since it is based on individuals considering alternate outcomes based on what could and should have happened. Here, the multi-focal perspective of organizational goals, supervisor goals, and employee goals may be especially useful in determining whether the goal structure is cooperative or conflicting.

**CONCLUSION**

There is a natural social exchange relationship occurring between employee and employer – the employee offers labor in exchange for pay from the employer. Many justice theories build upon this exchange relationship by invoking the norm of reciprocity. We argue that reciprocity may not be sufficient in explaining the antecedents and consequences of justice perceptions, and examine the exchange relationship in the context of a natural disaster using both reciprocity and
the principle of rationality. We also discuss the multi-focal perspective of goal structure, perceptions of justice, perceived organizational support and organizational citizenship behavior. In conclusion, we find that individual coping style influences both individual and organizational level variables and suggest that future theory development should include more social exchange rules as defined by Meeker (1971) and should include a multi-focal perspective.

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PREPARE TO ADAPT: ENVIRONMENTAL IMPACTS THAT CHALLENGE ORGANIZATION INERTIA

Leslie L. McKnight, Benedictine University, Springfield, IL, llmcknight@comcast.net

ABSTRACT

Rapidly changing environments can challenge organization inertia. Change can be gradual and incremental, or episodic, radical, and transformational. Regardless of the change, the inability for an organization to adapt to changes from the environment can result in the loss of competition, market share, performance, and ultimately, sustainability. Episodic, external impacts which cause punctuated equilibrium, jolts, and threats to an organization are explored in theoretical and descriptive detail. Antecedent internal preparation and environmental mapping strategies are introduced as adaptive orientations for organizations to become more flexible and agile in shifting and complex environments.

Keywords: Organization Inertia, Organization Adaptation, External Impacts

The field of organization development and change continues to emerge as a pragmatic response to ever changing environments and dramatic shifts in the social environment (Friendlander & Brown, 1974). Rapid changing environments result in organizations rapid responses to change in order to survive and prosper (Porras & Silver, 1991). As a response to these forces, organizations attempt to remedy these impacts by reengineering or downsizing. Today’s employees are busy keeping up with their own tasks and responsibilities in response to these frequent responsive changes. External trends affecting organizations are the rapid pace of technology advances, social mediums, globalization, and economic fluctuations (Friendlander & Brown, 1974). Greater awareness of settings, physical constructs, and social system are needed to adapt to the changing in the fast paced environment. The way an organization is structured can be an indicator on whether they are equipped or inept to respond to changes in the environment. An organizations structure is the accumulation and administration of capital, entrepreneurial skills, legitimacy and resources. Organizations function through processes involving tasks, coordination and decision making. Structural design has often limited a firm’s ability to respond effectively to changes in the environment (Baugmarter, et. al, 2009). Overtime organizations obtain reproducibility through processes of institutionalization and by creating highly standardized routines. Routines are a source of continuity of behavioral patterns in an organization. Hannan and Freeman (1984) assume that high levels of reproducibility of structure generate strong inertial pressures. Their theory is that an organizations structure is composed of hierarchical layers of structural and strategic features that vary in response to change. Social scientists in various fields of inquiry have pointed to factors that inhibit the adaptability of a system to its external environment. The concept of inertia refers to a correspondence between the behavioral capabilities of an organization and their environment (Hannan & Freeman, 1984). The speed of an organizations response relative to that of the organization reflects either a high or low inertia. A debate among organization theorists concerns the nature of organizational change (Romanelli & Tushman, 1985; Ginsberg & Buchholtz, 1990). Weick & Quinn (1999) define inertia as the inability for organizations to change as rapidly as the environment (1999). The strength of inertial forces may vary based on the organizations life cycle phase, size and...
complexity. Deep inertias are defined as internal arrangements; for example, internal politics and from the environment and public policies that reside in the deep framework of the organizations life. Overtime these inertias become normative standards. Attempting radical structural changes often threaten legitimacy, and the loss of institutional support can be devastating. The assumption that organizations rarely make fundamental changes successfully has proven to be a useful strategic simplification. It has allowed ecological theories and models to be applied to the problem of change in organizations over time. The claim that organization structures rarely change is the subject of dispute. March (1981) research on change suggests that organizations are continually changing, routinely, easily and responsively. Population ecology theorists variability of organization structures comes through the creation of new organizations and forms that replace the old ones (Hannan & Freeman, 1984). The rational adaptation theorists propose that organizations variability reflects designed and routine changes to structure in response to environmental changes (March, 1981; Ginsberg & Bucholtz, 1990). Contingency theorists emphasize structural changes that match technology and environment pairs (Lawrence & Lorsch, 1967; Ginsberg & Bucholtz, 1992). And institutional theories hold that organization structures are rationally adapted to endorse modes of organizations (Di Maggio & Powell, 1983; Ginsberg & Bucholtz, 1992). Hannan and Freeman (1984) believe that in a world of high uncertainty, adaptive efforts by individuals may turn out to be essentially random with response to future value. Gresov, Haveman, and Oliva (1993) mathematically modeled the effects of inertia on organizations responsiveness to changes in competitive pressures. Their model included fourteen structure design variables such as an organization’s mission, technology, size, and complexity. Thus the conclusion of the study revealed that the process in implementing change will determine organizations responsiveness to external pressures. Inertia is the tension that precedes change. The actual trigger of change can come from five sources; environment (Weick & Quinn, 1999; Armenakis & Bedian, 1999; Meyer, 1982; Meyer, Brooks, & Goes, 1990 ), performance (Miller & Friesen, 1980), characteristics of top managers (Kotter, 1995; Sastry, 1997; Armenakis and Bedeian, 1999), Structure (Staw, Sandelands & Dutton, 1981), and strategy (Sastry, 1997; Armenakis and Bedian, 1999). These triggers can ultimately result in either an upturn or downturn in the organization depending on their ability to respond to change.

An important emerging contrast in change research is the distinction between episodic and continuous change (Weick & Quinn, 1999). In incremental and continuous change, change is viewed as episodic as a result of event pacing (Weick & Quinn, 1999; Brown & Eisehhardt, 1997). This view of continuous change remains central to Kurt Lewin’s process of the episode to unfreeze, change, and refreeze (Cummings & Worley, 2008; Weisbord, 2004; Yaeger & Sorensen, 2008; Gallos, 2006). Continuous changes are organizational changes that tend to be ongoing, evolving and cumulative (Weinn & Quinn, 1999; Brown & Eisehhardt, 1997). In this vein, change can be described as continuous updates of policies, processes and systems. Continuous change is primarily planned change and is often built into the framework of the organization. Weick & Quinn (1999) believe that continuous change can be an accumulation of episodic changes but the noted difference is less prominent descriptions of episodic change such as inertia, triggers and placement. In continuous change, organizations focus more on planned change strategies, and establish timelines for implementation, evaluation, and reconfiguration (Brown & Eisenhardt, 1997). Quinn’s (1980) study of strategic planning at 10 large companies led him to call planned change process logical incrementalism, which supports the theory of
continuous change. Episodic change is defined as organizational changes that tend to be infrequent, discontinuous, and intentional. Episodic change differs from continuous change in that continuous changes are more incremental and minor and episodic changes tend to be more dramatic and revolutionary. Episodic change involves both equilibrium breaking and transitioning to a new equilibrium. Episodic change theorists (Kuhn, 1970; Gersick, 1991, 1994; Tushman & Romanelli, 1985, 1994; Meyers, 1982; Meyer, Brooks, & Goes, 1990) view change as long periods of stability in basic patterns of activity which are punctuated by short bursts of fundamental change. In the punctuated equilibrium model of change, there exists long periods of small incremental change which are interrupted by brief periods of discontinuous, radical change (Tushman & Romanelli, 1985, 1994; Gersick, 1991, 1994). Episodic changes occur in distinct periods that result in a misalignment of inertial deep structure in response to environmental demands (Weick & Quinn, 1999). Organization Development (OD) scholar Kurt Lewin asserts that continuous and episodic change can be planned changed (Weick & Quinn, 1999) however; three important processes in episodic events are; the facing of deep inertia’s, the triggering of change and replacement (Tushman & Romanelli, 1985, 1994; Gersick, 1991, 1994). Proceeding is the author’s exploration of episodic external impacts that challenge organization inertia and concludes with antecedent environment mapping strategies and internal preparations for more sustainable, adaptive responses.

ENVIRONMENTAL IMPACT: PUNCTUATED EQUILIBRIUM

Punctuated equilibrium theory is a prominent and well-regarded theory of how organizations change over time. Punctuated equilibrium was first coined by paleontologist Niles Eldredge and Stephen Jay Gould (1972) to describe a new theory in biological evolution. Just as Darwin’s theory of biological evolution has been extended to sociology, punctuated equilibrium has been studied by scholars in the field of organization and human development, political science, and various natural sciences. Darwin’s evolution theory of gradualism holds that change builds up slowly, leading to small mutations that accumulate over time until the organism is clearly no longer what it once had been. Evolutionary perspectives suggest that patterns of organization stability and change can be defined as punctuated equilibria.

FIGURE 1. PUNCTUATED EQUILIBRIUM MODEL
The punctuated equilibrium model was proposed by Tushman and Romanelli (1985; 1994) to account for the longer term development of business organizations. Gersick (1991; 1994) defines punctuated equilibrium as revolutionary changes within organizations over time. She gives an illustrative example that incremental changes and revolutionary changes are the difference of moving basketballs hoops higher to removing the hoops altogether. Punctuated equilibrium applied to management theory holds that organizations alternate between periods of equilibrium when they absorb minor changes to their environments and a period of revolution when major changes in their environment cause large-scale disruption and reconstitution (Markel, 2011). The theory (Figure 1.) divides organization change into two types; long periods of relatively stable equilibrium punctuated by short periods of deep change (Cheng & Van de Ven, 1996; Tushman & Romanelli, 1985, 1994; Gersick, 1991, 1994; Sastry, 1999). In the equilibrium period, the deep structure of the organization remains constant. Deep structures have the following 5 components; core values and beliefs, strategy of basic priorities, distribution of power, organization structure, and control systems (Weick & Quinn, 1999). Long periods of equilibrium are static, adaptations are put in place to achieve new goals and changes are relatively small and incremental. Argyris & Schon (1978) define these incremental changes as first order change that improve operations rather than change them. Punctuations are brief periods when the organization may undergo a profound transformation. This transformation period is defined by Argyris and Schon (1978) as a second order change where the deep structure (i.e. inertia) experiences some sort of friction which causes a disruption of change to the deep structure. Within this period organization members may be disoriented and confused because certainties which provided security are being challenged and undermined which causes for radical decision making and change. Following the punctuation is a very productive period where new thinking is stimulated and new rules emerge. Tushman and Romanelli depict organizations as a set of interdependencies that converge during equilibrium or stability in which conversely adaptable to environmental changes (1985, 1994). As environmental dynamics impact the organization, the pressure for change increases and a revolutionary period is entered. 

The increase in these external pressures can result in an episodic change in personnel and activity patterns which leads to a new level of equilibrium. Tushman & Romanelli (1985, 1994) examined this pattern of discontinuous change when they performed a study of activity domains of strategy, structure and distribution for 25 minicomputer producers founded between 1967 and 1969. In application of the punctuated change model, changes in the three domains were clustered versus incremental.

**Inertia Challenge**

Punctuated change is substantially different from continuous change, because the need for this type of change is usually urgent due to external pressures, and the change itself is rapid, which involves the dismantling of the organizations deep structure to create a new paradigm (Gersick, 1994; Tushman & Romanelli, 1985, 1994). These punctuations are considered revolutionary and are usually caused by the disruption of inertia within organizations. Romanelli and Tushman argue that it takes a revolution to alter a system of interrelated organization parts, especially when the parts are engrained in deep regulatory and technological systems (1994). These radical punctuated changes hold a sense of urgency which often can result in a change in the organization’s mission, strategy, and processes. The two basic sources of disruption of an organizations deep structure are; (1) internal changes that pull parts and actions out of alignment
and (2) environmental changes that threaten the organizations ability to obtain or retain resources (Gersick, 1991, 1994; Tushman and Romanelli, 1985, 1994). In convergent periods, organizations develop deep inertia properties that are challenged through external radical events to the extent that incremental modifications of existing strategic orientations may not be able to sustain the level of performance, unless the organizations reorder its inertial activities (Lant & Mezias, 1992). The leadership challenge in punctuated change events is to first break down the old equilibrium, manage the period of uncertainty about the future, and then create a new basis which to crystallize a new structure for the organization (Gersick, 1991). In this punctuated change, a set of different, distinctive new leadership capabilities need to be acquired to unleash the radical transformation. Lant & Mezias (1992) argue that a learning model of organization change can account for punctuated equilibria to balance the tension between stability and change. The application of a learning model to the punctuated equilibrium perspective can contribute to the understanding by offering an alternative explanation for patterns of stability, change and performance. They propose that patterns of convergence and divergence are outcomes of different types of learning. The first order learning (Lant & Mezias, 1992) is routine and incremental and reflects the organizations ability to remain stable in a changing context. The second form of learning is called second order learning and is defined as the search for alternative routines, rules, technologies and goals. The key insight here is that the learning order provides aspiration as a basis for determining when performance is interpreted as satisfactory and unsatisfactory. In this vein Lant and Mezias (1992) state that organizations have a target level of performance or aspiration that adjusts over time. The probability that a firm is determined based on the firms level of aspiration. They assert that change will most likely occur when firms are performing under their aspiration level. The learning model suggests a view of organizations internal processes which generate convergence and reorientation. This theory adds another dimension to the punctuated equilibrium model because it adds a focus on interpretations of experiences especially in terms of rules, aspirations levels and tendency to change. Usually major changes in the external environment such as competition, technology, fiscal, social and legal positions impact an organizations strategic orientation. (Tushman & Romanelli, 1994).

ENVIRONMENTAL IMPACT: ENVIRONMENT JOLTS

Meyer (1982) and Myer, Brooks, and Goes (1990) define an environmental jolt as ‘transient perturbations whose occurrence are difficult to foresee and whose impacts on organizations are disruptive and potentially imimical’ (pg. 515). Meyer (1982) compares the impact of environmental jolts to an earthquake. Like earthquakes, jolts may cause minor to seismic tremors, however, they rarely threaten the survival of soundly designed organization with well-maintained environmental alignments. Environmental jolts trigger organization responses that reveal how organizations adapt to the effects of the environment (Sine & David, 2003). In the natural world, there are various specifications for friction or punctuation, which all involve the interaction of two forces; a retarding force and a force directed at overcoming the retarding force. Earthquakes, as an example, are non-linear systems that result from friction of tectonic plates in which disruptions in the earth’s core causes the plates to push on one another (2011). Earthquakes result from a buildup of pressures from being thrown or shifted out of its proportion.
Earthquake dynamics measured are leptokurtic-consisting of high central peaks and fat tail (Figure 2.). The activity or disruptions are usually five or more deviations away from the mean.

**FIGURE 2. EARTHQUAKE SEISMOGRAM**

The simultaneous occurrences of extremes in leptokurtic distribution are strong evidence of a disturbance to the normal equilibrium (2011). Rhythms of change are described as periods of convergence marked off from periods of divergence of external jolts (Meyers, 1982; Meyer, Brooks, & Goes, 1990; Sine & David, 2003), usually caused by the external environment. The external environment can trigger disruptive changes in organizations. For example, changes in advanced technology can immediately change a firm’s capacity and service, especially when the old technology becomes obsolete.

**Inertia Challenge**

Environmental jolts result in immediate action. Institutions engage in search processes that uncover alternative arrangements. Institutions are by nature highly resistant to change. Sine and David (2003) expanded Meyers study to investigate the influence of environmental jolts on entire fields of organizational activity. Sine and David (2003) assert that environmental jolt theory highlights institutional assumptions about the environment and reveals relationships between practice, forms, processes and outcomes. The results of destabilization after a jolt often lends to a re-examination of institutional logic and practices. A common outcome of search process resulting from a jolt is the discovery of unexpected weaknesses that were not widely known or salient before the crisis. Sine and David (2003) performed a historical analysis on the institutional conflict of the electric power industry due to deregulated monopolies for over 40 years. As increasing demand for technologies, advances in fuel prices, and claims of natural monopoly emerged, electrical companies conducted search process for weaknesses in their firms to discover adaptability to changes. As a result, intellectual capital and advocacy increased to form new policy, financial resources were funneled to alternative strategies and structures, and structures were realigned to adjust to ongoing jolts in the environment. In conclusion, turbulence (i.e. jolts) to an industry drives alternative structures in power and strategy.

Meyer (1982) introduces a case study on hospitals near San Francisco that were jolted simultaneously due to unforeseen strike of anesthesiologist that lasted 30 days. Ironically, Meyer (1982) was already conducting a field study with the hospitals focusing on contingency relations between hospitals environment and their formal structures and processes. As soon as the strike began Meyer (1982) expanded his study to examine adaptive behavior during a jolt. Meyer (1982) selected three hospitals with disparate strategies, structures and processes using baseline data and their adaptations to the jolt were studied through qualitative measures which included interviews, observations, telephone calls and impromptu conversations with medical and administrative staff. Meyer (1982) gathered quantitative data related to outcomes based on financial records, occupancy figures and payrolls. The results of the study revealed three separate adaptations. One hospital remained unresponsive and yet solvent during the strike. Even
though occupancy fell to 50% the hospital did not respond with any layoffs and used its reserves to ‘weather the storm’. Another hospital responded by implementing contingency plans that resulted in layoffs and other cost cutting measures. The third hospital responded by process changes which involved alterations in shifts, and subunit responsibilities and extended hours. As a result, the hospital had a minimal impact in using their reserves. From this study, Meyer (1982) developed an environmental jolt model by triangulating data, observations, documents and archives from the three hospital responses to the strike (Figure 3). The cases revealed varied perceptions and adaptive behaviors. The conceptual model was derived to encompass the selective responses to feedback, incorporate stimulus response and theories of action in response to the jolt phenomenon. In comparison of Tushman and Romanelli’s (1985) punctuated equilibrium model to environmental jolts (Meyer 1982), it appears that punctuated equilibrium emphasizes dramatic revolutions and reorientations in organizations from an evolutionary perspective and Meyers (1982) environment jolt focuses on an episode which tests the organizations adaptability to dramatic shifts in the external environment.

**ENVIRONMENTAL IMPACT: ENVIRONMENTAL THREATS**

Change disrupts organizations across all frames and is most likely to succeed when the organization takes a multi-framed approach to problem evaluation. Staw, Sandeland and Dutton (1984) define a threat as an environmental event that has impending negative or harmful consequences for the organization. Managers are learning that they must manage change in response to increasing international competition, increased technology, decline of manufacturing; the changing values have changed concepts and approaches. Decision makers and managers are charged with formulating, directing, coordinating, and managing the organizations response to environmental change. Managers are responsible from sensing organization problems which cognitively are composed of noticing, interpreting and incorporating stimuli. For organizations to improve problem sensing, Kiesler and Sproull (1982) believe that organizations should learn from experience, plan, increased the speed with which managers receive information, and increase the range of information managers receive. When people gather information from the environment, they receive it as irregular chunks or segments than as a flow of continuous events or evenly punctuated episodes. Sudden and unpredictable changes are breakpoints for the perception to change. These instances affect how managers and decision makers frame problems and solutions. Kiesler and Sproull (1982) believe that under uncertainty and unpredicted events, increased information is automatically made available for the manager and decision makers to analyze the environment. A longitudinal study was performed by researchers Fredrickson and ISquint (1989) to determine the extent of which decision process had changed in the years since the original studies were conducted and whether the previously establish positive or negative relationships between decision making and performance held for the years since the original work. The study was based on the premise that there is no need to change a firm’s strategic decision making process if it is appropriate for the firm’s environment, however in an unstable environment; the appropriate adaptation is for management to make decisions less comprehensive and more specific to respond to the change in the environment. The study involved 65 firms in the paint and coating industry that participated in the earlier studies (Fredrickson & ISquint, 1989). The research attempted to assess strategic decision processes over time in different environments. The results of the study revealed that changes in
the characteristics of organizations were related to comprehensiveness of decision making. Also, over time the relationships were again positive in a stable environment and negative in the unstable environment.

**Inertia Challenge**
The existence of a widely described feature of decision making is referred to as inertia, or habits rooted in an operating system, or bureaucracy that seeks to stabilize its actions, despite the character of the environment (Kiesler & Sproull, 1982). In a similar argument (Tushman & Romanelli, 1985) suggests that overtime strategic processes become routine and established practices increase as groups become more rigid on their behavior pattern and decrease in diversity of information processed. Staw, Sandeland and Dutton (1984) introduce a threat rigidity thesis that asserts a tendency for individuals, groups, and organizations to behave rigidly when facing external environmental threats. Their study focused on how adversity affects the adaptability of the multiple layers of the organization. Much of the organization level work on threat has made use of theoretical construct or crisis. Staw, Sandeland and Dutton (1984) define crisis under three conditions; when there is a major threat to the system survival, little time to react, and the threat is unanticipated. A crisis is also perceived when there is a disruption on which no specific plans have been made, researches have attached the crisis label to numerous studies in various sectors such as government bodies reactions to national threats, budgetary cutbacks in universities, and industrial decline (Staw, Sandeland & Dutton ,1984). In examination of these studies from a theoretical standpoint, the effects threats have on organizations produce a simplification upon information processes. A second major effect of threat appears to be a mechanistic shift (Staw, Sandeland & Dutton ,1984). When threat confronts an organization, a major concern is the centralization of control and coordination of organization action. As important decisions increase, they are made at progressively higher levels within an organization hierarchy. Finally, there is some support for the predominance of efficiency concerns in organizations in times of threat. These effects are often brought about by a severe decline in performance and a reduction in slack resources within the organization.

**ORGANIZATION ADAPTABILITY**

With rapidly changing business environment, organizations have to change as well as adapt to external conditions if they want to survive. A new global economy demands profound changes in the behavior, perceptions and identities of managers and workers alike. The field of organization and development and change maintains that the organization is an open system that interacts with its environment and seeks a balance with the internal arrangements and the environment (Lawrence & Lorsch, 1967; Burke 1997). Beer & Walton (1987) believe that organizations must perform environmental mapping to align their internal transactions for their importance. The open systems view is complimentary to the involvement of external stakeholder and networks in organization effectiveness (Cummings & Worley, 2008; Burke & Litwin, 1992). Organizations do change in response to their external environments, but rarely change in a way that fulfills the intentions of those involved (March, 1981). Inability or unwillingness to change in the face of environmental changes will have a negative impact on firm performance (Goll, Johnson, & Raheed, 2007). Rational adaptation theorists view organizations as actors able to make prescriptive, routine decisions that lead to survival shifts. From this perspective,
organizations change easily and speedily in response to change. In contrast, the natural selection theorists view organizations as complex systems constrained by external forces. From this perspective, organizations are inherently inflexible and slow in responding to changing environmental opportunities and threats, and rarely have transformation (Hannan & Freeman, 1984). March (1981) assert that most change in organizations result neither from extraordinary organizational processes or forces, nor from uncommon imagination, but from stable routine processes that relate organizations to their environments. March (1981) believes that change occurs because organization in some way are not doing what they are supposed to do to be attentive to the environment. If an environment changes rapidly, so will the response to a stable organization. March (1981) views organizations as routine adaptive systems based on 6 basic principles; rule following, problem solving, learning, conflict, contagion, and regeneration. These adaptations are organizations changing sensibility to sustain, comply, and compete in their environments. Organizations naturally change in mundane ways however, these elementary process sometimes can produces surprises in a complex world. The rate of adaptation may lag behind the rate of the change in the environment which may lead to unanticipated or confusing consequences. March (1981) believes that change is driven less by problems than by solutions to the problems. Howard, Logue, Quimby, and Schoeneberg (2009) assert that no single program or theory can fix organizational problems. The question is not is there a solution, but which solution best fits. In order to assess the appropriate organization change paradigm, they suggest examining organizations from four different frameworks to create a broader, systems level perspective.

The four frames defined are:
1. Structural: How organizations delegate responsibility, hierarchy, rules and regulations and how these elements affect organization life
2. Human resources: how organizations develop, manage, motivate human capital
3. Political: How power is gained and lost, competition for scarce resources, building coalitions
4. Symbolic: How organizational culture, symbolic behavior, ritual, and creatively affect organization development.

Most organization theorists explain variability in organization characteristics through reference to the history of adaptations, but Hannan and Freeman (1984) argue that adaptation occurs at the population level which are forms of the organization replacing each other as a condition to change. This population ecology theory rests on the premise that organizations are subject to strong inertial forces, that is that they seldom succeed in making radical changes in face of environmental threats. Population ecologists focus on the dominating role of task environments, and institutional theorist have focused on the role of institution environments mediated by forces like regulation and legislative changes (Di Maggio & Powell, 1983; Ginsberg & Bucholtz, 1990; Vossellman & Meer-Kooistra, 2006). Researchers in these arenas have applied these theoretical frameworks to the differentiation of inertial and inductive tendencies in organizing and distinctions between the process of change and their adaptive consequences. Inertia dominates the traditional population ecology literature while flexibility dominates the rational adaptation theories which emphasize organization tendencies toward inducement and mobilization. Isomorphism dominates the institutional theories of organization tendencies toward conforming. Ginsberg and Bucholtz (1990) conducted a study to determine organization responsiveness through the application of all 3 theories; inertial, adaptive, and institution. Dramatic changes in
the federal governments HMO policies made the health environments a rich study for organization responses to radical environmental shifts. The research revealed that variable conditions influence inertia; organization age, size, and systems coupling. Adaptive forces were identified; internal and external demands, competitive pressures, and environmental opportunities. Institutional forces such as policies and procedures and other regulatory compliance issues place pressures on organizations to adapt and change. All three forces woven together affect organization behavior and their decision making process. These forces determine organizations responsiveness to radical change.

ORGANIZATION IMPLICATIONS

Contingency theorists Lawrence and Lorsch (1967) agree that management styles and structure should be flexible and able to adjust to changes in the external and internal environment (Gallos, 2006). In essence, an organization should be designed in such a way that contingency planning is a normal practice and implanted within the organizations structure. What strategy-making processes produce survival-enhancing strategic change? What is the link between strategy making and organizational inertia? When links among subunits are hierarchical, one unit can change its structure without requiring any adjustments by other units outside its branch. However, when the patterns are nonhierarchical change in one subunit requires adjustments by many more subunits. Long chains of adjustments may reduce the speed on which organizations can reorganize in response to environmental threats and opportunities (Bower, 2006). In Hannan and Freeman’s (1984) research, the capacity to respond quickly to new opportunities competes with the capacity to perform reliability and accountably. Structures of organizations have high inertia when the speed of reorganization is lower than the rate of which environmental conditions change. Thus inertia is the correspondence between the behavior and decision making capabilities in response to the environment. Organizations need to maintain dialectic between the process of change and future events (March, 1991). Planning change should also include even the insensible events because with unpredictability the insensible could occur. This would cause the least response to adaptation when the unpredictable has been considered. Substantial changes occur when routine procedures and interrupted by unintended events. Meyer, Brooks, and Goes (1990) study on industry and organizational level changes taking places in hospitals from the 1960’s to 1980’s due to mounting competitive pressures demonstrated how competitive environments impacts internal components and are necessary for organization adaptation over time. Similar studies support how organizations adapt to external pressures. Kelly and Amburgey (1991) investigated organizational inertia and momentum in the airline industry following its 1978 deregulation. This phenomenon was viewed as discontinuous second order change as deregulations transformed the fundamental nature of the airline industry. Haveman (1992) investigated legislative and technological changes to the California savings and loan industry. Haveman (1992) concluded that in response to dramatic second order changes, a shift in organizational structures and activities can increase short term performance and long term survival chances. Sastry (1997) developed a simulation model for analyzing the dynamics of organizational change. The model focus on four variables: strategic orientation, inertia, perceived performance by top managers, and pressure for change. Sastry concluded that change efforts are likely to fail if an organization adopts a strategic orientation that does match the requirements of the external environment (Armenikas, Sastry, 1997).
Scholar and researcher Kotter (1996) has one of the most inclusive process oriented change models which outlines eight steps for change agents to follow in implementing fundamental changes in operations and processes. This model was initially designed to implement change; however it can also be used as an antecedent process to prepare for adaptive responses to environmental impacts such as punctuation, jolts and threats:

1. Establish a sense of urgency by relating the external realities to real and potential crisis and opportunities facing an organization
2. Form a powerful coalition of individuals who embrace the need for change and rally others for a desired end result
3. Create a vision to accomplish the end result
4. Communicate the vision through communication channels
5. Empower others to act on the vision changing structures, systems, policies and procedures in ways that will facilitate implementation
6. Planning for and creating short term wins by publicizing success and momentum for continued change
7. Consolidating improvements and changing other structures, systems, process and policies
8. Institutionalizing the change effort and organization success

Meyer (1982) offers an advance model of adaptations that depicts three phases to adaptations to jolts; an anticipatory phase, responsive phases, and a readjustment phase after the shocks subsides (Figure 3.) In Meyer’s (1982) analysis of the responses, strategy is seen as the perceptions of stimuli and adaptive capabilities. Structure is the focus on task allocations among subunits and mechanisms. Ideologies are the shared beliefs that relate the values and actions. The outcomes, resiliency, and retention are the results of the adaptation, whether organizations achieve expected outcomes, modified their theory of action or augmented behavioral repertoires (March, 1981; Reissner, 2005). Meyer’s (1982) environmental conditions in his adaptive model are congruent to the earthquake seismogram from Figure 2. Beer & Walton (1987) assert that theory in the organization and development field should catalog how external forces create the opportunities for change. Also rather than assume there is one single way to change organizations there should more contingency theories of organization changes. The theories would outline alternative change strategies based on the organizations stage of development. Organizations can themselves be more effective in they can understand their competitive
environment and seek opportunities for change in addition to the ability to self-diagnosis and design in response to external stimuli. Major environmental changes have focused management attention on managing discontinuities in organization lives. The field of organization development and change will have to become concerned with theory and practice and of managing continual adaptation of internal organizational arrangements to respond to changes in the external environment (Beer & Walton, 1987).

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DIFFERENTIAL EFFECTS OF PRE- AND POST-ACQUISITION R&D EXPENDITURES ON POST-ACQUISITION PERFORMANCE

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ABSTRACT

Drawing upon organizational behavior theory and the resource-based view, we argue that internal R&D activities can enhance absorptive capacity but also result in adverse effects. We therefore suggest that the effects of pre- and post-acquisition R&D activities on post-acquisition performance are uniquely different. Using a sample of 950 technology acquisitions, we find an inverted U-shaped relationship between post-acquisition performance and pre-acquisition R&D expenditures, as well as a U-shaped relationship with post-acquisition R&D expenditures. Our findings contribute to the literature related to acquisition performance and the relationship between internal R&D and external acquisitions.

INTRODUCTION

Acquisitions have been a prominent strategy for firms and have a tremendous impact on the economy as they occur frequently and involve enormous sums in terms of transaction value (Hitt, Hoskisson, Ireland, & Harrison, 1991; King, Slotegraaf, & Kesner, 2008). Researchers have paid increasing attention to acquisitions as a method for firms to acquire new technologies (Benson & Ziedonis, 2009; King, Covin, & Hegarty, 2003). This type of acquisition accounts for over two-fifths of the value of U.S. acquisitions made in the 1990s (Inkpen, Sundaram, & Rockwood, 2000). There has also been a contemporaneous debate as to whether technological acquisitions complement or substitute for in-house R&D activity to enhance post-acquisition performance (Cassiman & Veugelers, 2006; Gans & Stern, 2000).

Internal R&D and external acquisitions can be viewed as “make” versus “buy” strategies as described in transaction cost theory (Williamson, 1985). From this perspective, they are substitutable for each other as a strategy for obtaining new technological capabilities (Cassiman & Veugelers, 2006; Blonigen & Taylor, 2000). Recent studies have employed the resource-based view (Barney, 1991) and argued that post-acquisition performance hinges on acquiring firms’ idiosyncratic absorptive capacity to integrate target firms’ technologies (e.g., Benson & Ziedonis, 2009; Capron & Pistre, 2002). According to organizational learning theorists, a firm’s absorptive capacity is largely determined by its in-house R&D activities (Cohen & Levinthal, 1990; Mahoney, 1995; Mowery, Oxley, & Silverman, 1996). Drawing on these arguments, researchers have suggested that in-house R&D and external acquisitions may best be viewed as complementary in order to generate technological outputs (e.g., Capron & Pistre, 2002; Cassiman & Veugelers, 2006; Cohen & Levinthal, 1990; Freeman, 1991; Lane & Lubatkin, 1998). This line of research often focuses on the positive effects of organizational learning to explain the relationship between R&D, absorptive capacity, and thus performance. Yet, organizational learning theory and more broadly organizational behavioral theory (Cyert & March, 1963) indicate that organizational learning can enhance a firm’s knowledge and capabilities but at the same time result in negative effects such as increased local search and rigidity (Allen, 1986; Nelson & Winter, 2002). In sum, the relationships between internal R&D, acquisitions, and performance appear to be theoretically complex and empirically ambiguous.
(Gans & Stern, 2000); and there is a recognized need for further research to investigate these relationships (Tsai & Wang, 2008).

Our paper contributes to this line of research by combining the resource-based view (Barney, 1991) and organizational behavioral theory (Cyert & March, 1963), especially its two most direct descendants: organizational learning theory (Levitt & March, 1988), and evolutionary economics (Nelson & Winter, 2002), to explain the relationships between pre- and post-acquisition R&D expenditures and post-acquisition performance in the context of high-tech firms. To test our hypotheses, we use a sample of 950 technological acquisitions from 1995 to 2005. Our work offers several notable contributions relative to previous studies. First, drawing on the resource-based view (Barney, 1991) and organizational behavioral theory (Cyert & March, 1963; Cohen & Levinthal, 1990), we argue that the relationship between R&D intensity and post-acquisition performance is neither monotonically linear nor the same in nature in both pre and post-acquisition periods. Pre-acquisition R&D helps to develop a firm’s capacity to select target firms while post-acquisition R&D helps to integrate and deploy target firms’ technological inputs (Saxton & Dollinger, 2004). Pre-acquisition R&D is a necessity for developing absorptive capacity, and thus enhancing acquisition performance (Rosenberg, 1990; Veugeler, 1997). However, higher levels of pre-acquisition R&D intensity may also adversely affect post-acquisition performance because such intensity may lead to technical overlaps and redundancies (Mowery et al., 1996), along with organizational inertia and resistance to external knowledge (Allen, 1986; Nagarajan & Mitchell, 1998). Unlike pre-acquisition R&D, post-acquisition R&D may not result in such adverse effects because it contributes to the integration and exploitation of acquired firms’ technologies. According to the resource-based view, acquiring firms need to make a substantial post-acquisition R&D investment in order to fully integrate target firms’ technical inputs and create firm-specific competitive advantage (Benson & Ziedonis, 2009; Pablo, 1994). Thus, we hypothesize different forms of relationships between pre- and post-acquisition R&D intensity and subsequent firm performance in that the former represents an inverted U-shaped relationship while the latter represents a U-shaped relationship. Second, unlike previous studies, which often examine the relationship between R&D and post-acquisition performance in either pre- or post-acquisition periods (Barkema & Schijven, 2008), our study not only investigates the effect of both pre- and post-acquisition R&D but also their interactive effect. Both target firm’s selection, which is influenced by pre-acquisition R&D, and integration, which is influenced by post-acquisition R&D, are critical to acquisition performance (Saxton & Dollinger, 2004). We postulate that firms should effectively invest in R&D in both pre- and post-acquisition periods in order to develop technological outputs and enhance performance.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The acquisition literature suggests that acquiring firms can create value by selecting undervalued target firms and/or integrating target firms so as to build synergies (Saxton & Dollinger, 2004). Acquisition synergies may result from various sources, such as economies of scale and scope, market expansion, and access to new technologies (King et al., 2003; Teece, 1986). Despite these potential synergies, acquisitions often fail to enhance acquiring firms’ shareholder value (Haleblian et al., 2009; Hitt et al., 1998; King et al., 2004). Recently, researchers have employed the resource-based view to explain this paradox (e.g., Heeley, King
& Covin, 2006; Mitchell & Singh, 1996). The resource-based view (Barney, 1991) has been widely used to explain how individual firms’ valuable, rare, non-substitutable, and inimitable resources lead to competitive advantages and superior performance. Unlike other theoretical perspectives, which tend to explain the generic benefits of acquisitions, the resource-based view suggests that the extent to which firms can create value from acquisitions hinges on their idiosyncratic ability to identify and exploit target firms’ resources (Benson & Ziedonis, 2009; Heeley et al., 2006).

Acquisitions have become a popular approach for obtaining new technologies, which are crucial for firms to stay competitive in the new knowledge-based economy (Bettis & Hitt, 1995; Nicholls-Nixon & Woo, 2003). Absorptive capacity, a term coined by Cohen and Levinthal (1990: 128), which refers to the ability to “recognize the value of new information, assimilate it, and apply it to commercial ends” is often used to explain technological acquisition performance. From the resource-based perspective, acquiring firms with superior absorptive capacity tend to have better acquisition performance. Organizational learning theory suggests that R&D is an important driver of absorptive capacity (Camison & Fores, 2010; Cohen & Levinthal, 1990). Thus, researchers have recently employed the resource-based view in conjunction with organizational learning theory to explain the impact of R&D on acquisition performance (e.g., Jimenez-Jimenez & Sanz-Valle, 2011; Nicholls-Nixon, & Woo, 2003; Uhlenbruck, Hitt, & Semadeni, 2006; Zaheer, Hernandez & Banerjee, 2010).

Yet, organizational learning theory and especially the closely related work in evolutionary economics (Nelson & Winter, 2002) suggest that internal R&D may also lead to organizational inertia and routines which may adversely affect a firm’s ability to select and integrate target firms (Hannan & Freeman, 1984; Lavie & Rosenkopf, 2006). Though both organizational learning theory and evolutionary economics theory are rooted in organizational behavioral theory (Cyert & March, 1963), the former focuses on organizational learning and search whereas the later emphasizes the formation and effects of organizational routines (Argote & Greve, 2007). Characterized as path dependent and firm-specific, learning and routinization can both enhance efficiency and shape competitive advantage while hindering a firm’s ability to adapt to changes in its internal and external environments (Hannan & Freeman, 1984). Specifically, internal learning may enhance firm knowledge and competence in certain areas but also lead to increased local search, innovation traps, and resistance to external knowledge (Benner & Tushman, 2002; Leonard-Barton, 1992; Levitt & March, 1988). In the same vein, routinization may result in both increased efficiency and inertia in the forms of irreversible managerial commitments and inappropriate responses to the environments (Hannan & Freeman, 1984; Lavie & Rosenkopf, 2006; Nelson & Winter, 2002).

Scholars have advocated that it is important to examine the determinants of acquisition performance in both pre- and post-acquisition stages (Barkema & Schijven, 2008; Saxton & Dollinger, 2004). The most decisive factor that determines acquisition performance in the pre-acquisition stage is a firm’s ability to select an appropriate target firm, while that of the post-acquisition stage is a firm’s ability to integrate and exploit its target firm (Saxton & Dollinger, 2004). Thus, pre- and post acquisition R&D expenditures might have different effects on acquisition performance. In the next section, we will draw upon these theoretical perspectives to hypothesize the effects of both pre- and post-acquisition R&D on acquisition performance.
The Effect of Pre-Acquisition R&D on Acquisition Performance

Cohen and Levinthal (1990) argue that prior knowledge is the necessary condition for the development of absorptive capacity, which in turn decides a firm’s success in identifying and exploiting a target firm. Other researchers (e.g., Benson & Ziedonis, 2009; Cohen & Levinthal, 1990; Makri, Hitt, & Lane, 2010; Wu & Shanley, 2009; Zaheer et al., 2010) have confirmed that firms need to have considerable internal knowledge in order to select appropriate target firms. As R&D is an important source of prior knowledge, R&D expenditures tend to be positively related to absorptive capacity and thus acquisition performance (Cohen & Levinthal, 1990). Through R&D activities, firms build technical knowledge, which is needed to identify and evaluate target firms. Rosenberg (1990) suggests that internal R&D is requisite to develop basic research capabilities necessary to monitor and evaluate external technological opportunities. Pre-acquisition R&D enhances a firm’s ability to not only select but also integrate a target firm successfully. Freeman (1991) asserts that the combination of in-house R&D and external technical inputs enhances innovation performance. Various studies have indicated that acquiring firms with technical knowledge similar and complementary to their target firms tend to have better acquisition performance (Cloodt, Hegedoorn & Van Kranenburg, 2006, 2006; Kim & Finkelstein, 1998; Makri et al., 2010; Zaheer et al., 2010).

However, some researchers have implied that the relationship between ex ante R&D intensity and ex post acquisition performance might not be monotonically linear (Coodt et al., 2006; Kapoor & Lim, 2007). One line of argument is that internal R&D and external acquisitions are two alternative strategies for firms to pursue in obtaining technical inputs (Hall, 1990). As firms’ resources are limited, they tend to choose between an internal growth strategy with relatively high R&D intensity and an external growth strategy through acquisitions (Blonigen & Taylor, 2000). In some cases, it seems that firms undertake both strategies as they invest intensively in internal R&D activities and make acquisitions as well. But the fact is that such firms may fail to produce valuable innovations from their internal R&D efforts and have to turn to acquisitions to obtain new technologies (Blonigen & Taylor, 2000; Trajtenberg, 1990). In addition, intensively investing in R&D prior to an acquisition is likely to result in technical redundancy and overlap for the acquiring firm, lowering its post-acquisition performance (King et al., 2008; Zollo & Singh, 2004). Another important argument against a monotonically linear relationship between pre-acquisition R&D intensity and post-acquisition performance is drawn upon evolutionary economics theory (Nelson & Winter, 2002). As firms commit to pre-acquisition R&D activities to build up their absorptive capacity, they create inertial forces, which in turn subdue their absorptive capacity and adversely affect the post-acquisition integration process (Cohen & Levinthal, 1990; Hannan & Freeman, 1984; Leonard-Barton, 1992). High levels of R&D may well result in inertia, such as increased local search (Benner & Tushman, 2002), innovation traps (Leonard-Barton, 1992), biases to external knowledge and not-invented-here syndrome (Allen, 1986), irreversible commitments to certain types of research (Nagarajan & Mitchell, 1998), and increased complexity regarding the unlearning process (Starbuck, Greve, & Heberg, 1978). A firm tends to increase both the number and the size of its R&D projects when it increases its R&D intensity up to a certain level. Beyond a certain point however, it tends to lock in a number of projects in a path-dependent manner (Benner & Tushman, 2002). In other words, with high levels of pre-acquisition R&D intensity, acquiring firms tend to engage in local search within certain technological areas rather than distant search which may lead to more valuable technological acquisitions (Benner & Tushman, 2002; Levitt & March, 1988). Some
Researchers find that firms that commit to existing R&D projects are less likely to explore new technologies (Kelly & Amburgey, 1991; Lavie & Rosenkopf, 2006). Organizational inertia resulting from high levels of pre-acquisition R&D intensity may not only have adverse effects on an acquiring firm’s ability to select, but also its ability to integrate the target firm. Internal R&D builds up firm-specific knowledge and research culture that may make the integration of a target firm’s technical inputs complicated and costly (Ghemawat, 1991; Nagarajan & Mitchell, 1998). Acquiring firms have to unlearn some of their knowledge in order to integrate their target firms’ technologies (Starbuck, Greve, & Heiberg, 1978). The more internal knowledge and capabilities an acquiring firm has, the more rigid it may be in its learning and integration of new knowledge and capabilities (Leonard-Barton, 1992). Thus, we propose the following hypothesis:

Hypothesis 1. There will be an inverted U-shaped relationship between pre-acquisition R&D intensity and post-acquisition performance.

The Effect of Post-acquisition R&D on Acquisition Performance

The impact of post-acquisition R&D on post-acquisition performance is different from that of pre-acquisition R&D in two important ways. First, while pre-acquisition R&D helps build a stock of prior knowledge, which is helpful for both the selection and integration of a target firm, post-acquisition R&D only aids the integration process. Second and relatedly, post-acquisition R&D does not result in adverse effects, such as increased local search, resistance to external knowledge, and unlearning problems as in the case of pre-acquisition R&D because it occurs after the acquisition. In the post-acquisition stage, the most important factor that determines a firm’s post-acquisition performance is its ability to integrate and exploit the target firm (Barkema & Schijven, 2008; Castrogiovanni & Bruton, 2000; Cohen & Levinthal, 1990). High-tech firms’ main purpose in acquisitions is to obtain technological inputs (Heeley et al., 2006). According to the resource-based view, the integration and further development of a target firm’s technological inputs require sustained R&D investment from an acquiring firm following its acquisition (Ahuja & Katila, 2001; 2005; Karim & Mitchell, 2000). Specifically, Kim and Finkelstein (2009) suggest that acquisition performance depends on the realization of the potential of a target firm. Lee and Allen (1982) find that the integration of target firm’s technological inputs requires considerable time lags and resources. In the same vein, Barkema and Schijven (2008) argue that integration activities such as restructuring are crucial to unlocking the full potential of acquisitions.

Empirical studies have generally reported a positive relationship between R&D expenditures and performance (e.g., Chauvin & Hirschey, 1993; Eberhart, Maxwell, & Siddique, 2004). Yet, some studies (e.g., Pindado, Queiroz, & Torre, 2010) argue that the effect of R&D expenditures on performance is contingent on certain firm characteristics. In the context of acquisitions, the empirical findings concerning the effect of R&D expenditures are also inconclusive. Tsai and Wang (2008) find that R&D intensity positively moderates the relationship between technological acquisitions and firm performance, while Jones and colleagues (2001) report no significant relationship between R&D expenditures and acquisition performance. Based on the above literature and the logic of the resource-based view, we argue that acquiring firms have to make a substantial post-acquisition R&D investment following their technological acquisitions in order to create competitive advantages. Thus, high levels of post-acquisition R&D expenditures can help acquiring firms to integrate their targets’ technologies so as to create valuable, idiosyncratic technological capacities and thus enhance firm performance.
Low levels of post-acquisition R&D expenditures also may enhance post-acquisition performance because such levels do not add much to the acquirer’s costs, and there may be relatively high marginal payoffs at relatively low levels of post-acquisition R&D. In addition, some benefits of a technological acquisition, such as the target’s new products and patents, may be realized without incurring much post-acquisition R&D investment. However, post-acquisition performance may be relatively poor at mid-ranges of post-acquisition R&D expenditures. At such levels firms may incur material R&D costs, yet fail to achieve any idiosyncratic, valuable technological synergies. Again, this is because, mid-range R&D expenditures only increase the acquirer’s costs. In sum, we suggest a U-shaped relationship between post-acquisition R&D and performance.

Hypothesis 2. There will be a U-shaped relationship between post-acquisition R&D expenditures and post-acquisition performance.

The Interactive Effect of Pre- and Post R&D and Post-Acquisition Performance

Researchers have argued that superior acquisition performance is the result of both target selection in the pre-acquisition stage and target integration in the post-acquisition stage (Barkema & Schijven, 2008; Pablo, 1994; Zollo & Singh, 2004). If a firm selects and acquires a target firm which does not offer any valuable synergistic potential, its acquisition performance is likely to be low regardless of how much in resources it expends to integrate the target firm. Similarly, acquiring a target firm with synergistic potential may not result in superior acquisition performance if the acquiring firm fails to integrate the target firm. Recall we argue that pre-acquisition R&D enhances a firm’s ability to select and integrate its target while post-acquisition R&D plays an important role in integrating and further developing a target’s technological inputs. Also recall we reason that moderate levels of pre-acquisition R&D expenditures are more beneficial than low and high levels of pre-acquisition R&D expenditures. With regard to post-acquisition R&D, high levels of expenditures help enable acquirers to fully exploit the technological acquisition, resulting in considerable performance gain. Low levels of R&D expenditures also may increase firm performance due to the realization of the acquisition’s benefits which does not require much R&D investment. In order to have superior acquisition performance, acquiring firms need to make appropriate R&D investments in both pre- and post-acquisition stages. Specifically, the combinations between moderate levels of pre-acquisition R&D expenditures and either high or low levels of post-acquisition expenditures will have a positive impact on performance, of which the former has a greater impact than the latter. However, as higher post-acquisition R&D expenditures may help unlock greater synergistic potential between the acquirer and the target, we posit that the combination between moderate pre- and high post-acquisition R&D expenditures will have greater effect on subsequent firm performance than that between moderate pre- and low post-acquisition R&D expenditures. Thus, we propose the following hypothesis.

Hypothesis 3. The interactions between moderate levels of pre-acquisition R&D expenditures and either high or low levels of post-acquisition R&D expenditures will positively affect post-acquisition performance.

METHODS

Sample
To test our hypotheses regarding the effects of pre- and post-acquisition R&D expenditures and slack resources on post-acquisition performance, we used a sample of technological acquisitions occurring from 1995 to 2005. We chose this time period as we attempt to include a large number of the acquisitions which occurred in the past two decades. We used 2005 as the cut-off year in order to collect post-acquisition data. To construct our sample, we first identified acquisitions by high-tech firms in our selected period in the Securities Data Corporation (SDC) database. Following Cloodt and colleagues (2006), we defined high-tech firms as those in such industries as electronics, computers, pharmaceuticals, software, R&D services, and telecommunications. We then matched the acquisition data with the accounting data from COMPUSTAT and stock price data from the Center for Research in Securities Prices (CRSP). The matching process generated 2,382 observations. Following conventions in the acquisition literature, we required that our sample satisfy the following criteria: 1) essential information, such as transaction dates, types (i.e., merger vs. tender offer), payment method, industry information, and target location on each transaction should be available; 2) the transaction value should be at least 1 million dollars and we only included transactions with a 100 percent acquisition or a majority stake purchase; and 3) the takeover should be completed. These requirements reduced our sample to 1,263 observations. We finally excluded acquiring firms without complete data for the variables used in our multi-factor regressions, resulting in a reduction of 313 observations. Our final sample consisted of 950 technological acquisitions from 1995 to 2005.

Variables

**Dependent variable.** The dependent variable was the average sales growth over the three year period following the acquisition \( \text{salesgrowth}_{\text{Post}} \). Although previous acquisition research often uses market performance measures, such as abnormal returns, for the purpose of our work and consistent with previous studies involving post-acquisition performance (e.g., Barkema & Schijven, 2008; Zollo & Singh, 2004), we used an accounting measure of post-acquisition performance. We chose sales growth as our accounting measure of post-acquisition performance because it is less affected by other factors such as operating costs, than are other accounting measures, such as ROA and ROE, and therefore better captures the effects of acquisitions and R&D efforts (Tsai & Wang, 2008). Data for sales growth were obtained from Compustat.

**Independent and moderating variables.** Our independent variables are pre-acquisition R&D expenditures \( R&D_{\text{Pre}} \) and post-acquisition R&D expenditures \( R&D_{\text{Post}} \), which are measured as the average R&D expenditures scaled by sales over three years before and after the acquisition, respectively. The data for these independent and moderating variables were collected from Compustat.

**Control variables.** We controlled for a number of factors that could impact post-acquisition performance, including year effects, industry effects, firm size, portion of stock paid, relative transaction value, tender offers, technological relatedness, prior performance, and slack resources. The year of acquisitions may play a part in acquisition performance. For instance, McNamara and colleagues (2008) find that acquisition performance varies between early and late acquirers in an acquisition wave. We controlled for year effects by constructing 10 dummy variables, each for one of the 10 sampling years. In order to control for industry effects, we developed industry dummies using the first-two digits of acquiring firms’ SIC codes. We included six industry dummies, which included SIC codes 28, 35, 36, 48, 73, and 87. *Portion of
stock paid is the portion stock made up in the payment of the acquisition. A number of studies (e.g., Franks and Harris, 1989; Sung, 1993) find that cash-financed and stock-financed acquisitions have differential effects on acquisition performance. Thus, we controlled for relative transaction value, which reflects the transaction value divided by the acquirer’s size, measured in total assets. We included the mode of the acquisition (i.e., a tender offer or a merger) as a control variable since researchers (e.g., Jensen & Ruback 1983; Jarrell & Poulsen 1989; Khanna 1997) have reported mode of the acquisition has a significant impact on wealth creation for acquirers. Previous studies have reported that tender offer and multiple bidders might affect acquisition performance (Flanagan & O’Shaughnessy, 2003). We created the tender offer variable as a dummy variable that takes the value of 1 if the mode of acquisition is a tender offer and 0 otherwise. We included the number of competing bidders (number of bidders) as a control variable by counting any firm attempting to acquire the same target. Acquisition studies generally report that technological relatedness between acquirer and target has a positive impact on acquisition performance (e.g., Cassiman et al., 2005; Cloodt et al., 2006). We, therefore, controlled for technological relatedness, which we identified by comparing the acquirer and target’s SIC codes. We included pre-acquisition three-year average sales growth (salesgrowthpre) to control for the effect of prior performance. Finally, we controlled for the impact of slack resources as previous studies indicate that slack resources can affect acquisition performance (Iyer & Miller, 2008). We operationalized post-acquisition slack resources as average cash and cash equivalents over the period of three years after the acquisition (cashPost). The data for these control variables were collected from Compustat, SDC, and CRSP.

Analyses

To test our hypotheses involving the relationships between pre- and post-acquisition R&D expenditures and post-acquisition performance as well as the moderating effect of slack resources on that relationship, we use ordinary least squares (OLS) regressions. The baseline model (model 1) included control variables and the base values of our independent variables (R&DPre and RDPost). We tested hypothesis 1 regarding the inverted U-shaped relationship between R&DPre and post-acquisition performance, in model 2, in which we added the quadratic form of R&DPre to the base model. We tested hypothesis 2 regarding the U-shaped relationship between RDPost and post-acquisition performance in model 3, in which we added the squared term of RDPost to the base model. To test the interaction effect of R&DPre and RDPost, we classified the sample into tercile groups based on the levels (low, medium, and high) of pre- and post-acquisition R&D expenditures. We then constructed two variables, the combination of moderate R&DPre and high RDPost and the combination of moderate R&DPre and low RDPost. In model 4, we added these two variables to the model used to test hypothesis 3. For model specification, we checked for multicollinearity by examining variable inflation factor (VIF) statistics. All the variables’ VIF results are smaller than 6, which is less than 10, suggesting no severe problem with multicollinearity.

Results

Table 1 presents the descriptive statistics and correlation coefficients for the variables used in the paper. Table 2 provides the results for models used in our study. Model 1 is a baseline model consisting of the control variables and baseline values of the independent and moderator variables. As described previously, we controlled for year and industry effects by
adding five industry dummies and ten year dummies to our models. Because of the large number of dummies, we do not show them in table 2. Four year dummies (1998, 1999, 2000, and 2001) and one industry dummy (35: Computer and Office Equipment) are negatively and significantly related to post-acquisition performance. Among other control variables, relative transaction value, number of bidders, and cashPost are significant and positive (p < .05, p < .01 and p < .001, respectively), while size is negatively associated with salesgrowthPost (p < .001). Regarding the baseline values of the independent and moderator variables, the results show a negative and significant relationship between R&DPost and salesgrowthPost (p < .01).

To test hypothesis 1, which predicts an inverted U-shaped relationship between R&DPre and salesgrowthPost, we added the quadratic term of R&DPre to the regression equation in model 2. The results show a significant and positive relationship between R&DPre and salesgrowthPost (p < .05) and a significant and negative relationship between the squared form of R&DPre and salesgrowthPost. The squared regression coefficient is considerably higher in model 2 (R^2 = .249) than in the baseline model (R^2 = .237). Taken together, the results provide evidence of an inverted U-shaped relationship, thus supporting hypothesis 1 (Cohen and Cohen, 1983).

To test hypothesis 2, which predicts a U-shaped relationship between R&DPost and salesgrowthPost, we added the squared form of post-acquisition R&D expenditures to the base regression model in model 3. The results show that R&DPost is significant and negative (p < .01) while its squared form is significant and positive (p < .05). The change in R^2 between the baseline model (model 1) and model 3 is material (.2376 vs. .2479). These results indicate a U-shaped, curvilinear relationship between R&DPost and salesgrowthPost (Cohen and Cohen, 1983). Thus, hypothesis 2 is supported.

We tested hypothesis 3 in model 4 by adding two variables which reflect the interactions between moderate levels of R&DPre and the high levels of R&DPost, and between moderate levels of R&DPre and the low levels of R&DPost. The results show that only the combination of moderate R&DPre and low R&DPost is significant and positive (p < .01). Recall we predict both interactions are positive and significant and the coefficient of the interaction with low R&DPost is greater than that of the interaction with low R&DPost. Thus, hypothesis 3 is only partially supported. The results, however, are in line with hypotheses 1 and 2. Because R&DPre has an inverted U-shaped relationship with salesgrowthPost and R&DPost has a U-shaped relationship with salesgrowthPost, acquiring firms will have better performance if they have medium levels of R&DPre and either low or high levels of R&DPost. The significant effect of the combination between medium levels of R&DPre and low levels of R&DPost indicate that high-performing acquirers invest in R&DPre to enhance their ability to select targets and use acquisitions to substitute for their R&D activities. The insignificance of the combination between moderate levels of R&DPre and high levels of R&DPost may be owing to the fact that few firms make post-acquisition R&D investments substantial enough to create idiosyncratic, valuable synergies. They may spend so much on the acquisition, and therefore there is nothing left with which to pursue post-acquisition R&D.

**DISCUSSION**

Overall, our findings provide support for the behavioral theory’s premise, particularly its two most direct descendents: organizational learning theory and evolutionary economics, that internal R&D activities both help and harm post-acquisition performance; and relatedly pre- and post-acquisition R&D activities affect post-acquisition performance differently. Our findings
indicate that pre-acquisition R&D expenditures have an inverted U-shaped relationship with post-acquisition sales growth, while post R&D expenditures have a U-shaped relationship with post-acquisition sales growth. We found partial support for the combined effect of pre- and post-acquisition R&D on post-acquisition performance. Specifically, the combination between moderate levels of pre-acquisition R&D expenditures and low levels of post-acquisition R&D expenditures enhance post-acquisition performance. The results did not support our prediction that firms which have moderate levels of pre-acquisition R&D expenditures and high levels of pre-acquisition R&D expenditures will have greater post-acquisition performance. One possible explanation is that few acquiring firms invest in post-acquisition R&D activities sufficient enough to fully unlock the potential synergies from their acquisitions.

This study provides several implications for research and practice involving internal R&D and technology acquisitions as well as their effects on acquisition performance. First, our study suggests that it is important to look at pre- and post-acquisition R&D separately because they have different effects on post-acquisition performance. Researchers (Barkema & Schijven, 2008; Saxton & Dollinger, 2004) have pointed out that acquisition success depends on both the ex ante selection and ex post integration stages. Drawing upon organizational behavioral and the resource-based perspective, we suggest that pre- and post-acquisition R&D activities have different effects on a target’s selection and integration. Specifically, pre-acquisition R&D expenditures have an inverted U-shaped relationship with post-acquisition performance, while post-acquisition R&D expenditures have a U-shaped relationship with post-acquisition performance. In doing so, our findings help to shed light on the ambiguous relationship between R&D expenditures and acquisition performance (Gans & Stern, 2000). Previous studies have reported mixed results concerning the effect of R&D spending and acquisition performance (e.g., Jones et al., 2001; Tsai and Wang, 2008). Our study indicates that separating the effects of pre- and post-acquisition R&D expenditures may help to address the mixed results.

Second, our study extends the research involving the employment of the resource-based view and organizational learning theory to explain acquisition performance by emphasizing both negative and positive impacts of internal R&D activities (e.g., Cohen & Levinthal, 1990; Mowery et al., 1996). In general, acquisitions do not enhance acquiring firms’ performance. The resource-based view helps to explain why some firms have better acquisition performance than others. Specifically, firms which have superior, idiosyncratic absorptive capacity tend to have better acquisition performance. Organizational learning theory enhances this argument by explaining how absorptive capacity evolves as a result of organizational learning through R&D activities (Cohen & Levinthal, 1990). Unlike previous studies, which often focus on the positive effects of internal R&D activities, our study takes into account both their positive and negative effects. To identify the adverse effects of R&D activities, we employ both organizational learning theory and evolutionary economics theory. Though these theories have different focuses, they are both rooted in organizational theory, and both explicate the benefits and the adverse effects of internal learning activities (Argote & Greve, 2007). We hypothesize and find evidence that internal R&D activities have both positive and negative effects on post-acquisition performance.

Third, our study also sheds light on the debate regarding the substitutability and complementarity between internal R&D and external acquisitions as a firms’ strategy for obtaining new technical inputs. Previous studies often either support one or the other of these arguments. Some studies (e.g., Blonigen & Taylor, 2000; Cassiman & Veugelers, 2006) argue
that internal R&D and external acquisitions are substitutable for each other, while other studies (e.g., Capron & Pistre, 2002; Cassiman & Veugelers, 2006) argue that these activities should be viewed as complements in order to achieve superior innovation performance. Our findings indicate that in the pre-acquisition or selection stage, to some extent internal R&D is complementary to external acquisitions. Their complementarity only holds to a certain level of internal R&D intensity, at which point acquiring firms have developed sufficient absorptive capacity. This is shown by the inverted U-shaped relationship between pre-acquisition R&D expenditures and post-acquisition performance. In the post-acquisition or integration stage, the findings show that successful acquirers are those which either use a substitutability strategy (i.e., low levels of R&D expenditures following the acquisition) or complementarity strategy (i.e., high levels of R&D expenditures following the acquisition). A closer investigation reveals the combination of moderate complementarity ex ante and substitutability ex post is the most effective strategy for firms in our sample. In sum, our findings imply that internal R&D should be complementary to external acquisitions but only to a certain extent; and substitutability strategy tends to be more effective. These insights are consistent with the findings of other recent studies (e.g., Cloodt et al., 2006; Kappor & Lim, 2007).

Our study is not without limitations which might serve as suggestions and implications for future research. Our first limitation involves our implicit assumption that pre- and post-acquisition R&D expenditures are for the purpose of developing the technological capabilities relating to the acquisition. In many cases, acquiring firms may invest in multiple R&D projects to develop different technological capabilities other than those relating to the acquisition. In such cases, our theoretical arguments based on organizational behavioral theory are still applicable. For instance, regardless of the number of R&D projects, with greater internal R&D expenditures comes better absorptive capacity as well as more adverse effects, such as increased local search and resistance to external technologies. Thus, it might be useful to attempt to match concurrent, related R&D projects and acquisitions. Second, based on organizational behavioral theory, particularly organizational learning theory and evolutionary economics, we argue that greater R&D expenditures results in greater inertia. However, this relationship is likely to be affected by certain organizational factors such as management quality and organizational culture. Due to such factors, some firms may remain flexible and adaptive to external technologies even though they invest substantially in internal R&D activities. Because we used archival data, it is impossible for us to control for these affects. Future research can combine archival data and survey data to shed light on how organizational culture and other characteristics affect the impact of internal R&D on technological acquisition performance.

REFERENCES


### Table 1
Descriptive Statistics and Correlations

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<tr>
<th></th>
<th>Mean</th>
<th>Std. dev.</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>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>R&amp;D&lt;sub&gt;pre&lt;/sub&gt;</td>
<td>0.166</td>
<td>0.563</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2.</td>
<td>R&amp;D&lt;sub&gt;post&lt;/sub&gt;</td>
<td>0.179</td>
<td>0.378</td>
<td>0.419***</td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td>Salesgrowth&lt;sub&gt;pre&lt;/sub&gt;</td>
<td>0.466</td>
<td>1.727</td>
<td>0.275***</td>
<td>0.086**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>Salesgrowth&lt;sub&gt;post&lt;/sub&gt;</td>
<td>0.115</td>
<td>0.209</td>
<td>0.038</td>
<td>-0.139***</td>
<td>0.063†</td>
<td></td>
<td></td>
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<td>5.</td>
<td>Cash</td>
<td>19.632</td>
<td>1.800</td>
<td>-0.023</td>
<td>-0.040</td>
<td>-0.048</td>
<td>0.013</td>
<td></td>
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<td>6.</td>
<td>Size</td>
<td>21.666</td>
<td>1.762</td>
<td>-0.077*</td>
<td>-0.081*</td>
<td>-0.081*</td>
<td>-0.133***</td>
<td>0.870***</td>
<td></td>
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<td>7.</td>
<td>Relative transaction value</td>
<td>0.163</td>
<td>0.436</td>
<td>0.056†</td>
<td>0.040</td>
<td>0.071*</td>
<td>0.163***</td>
<td>-0.126***</td>
<td>-0.188***</td>
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<td>8.</td>
<td>Portion of stock paid</td>
<td>0.408</td>
<td>0.470</td>
<td>0.073*</td>
<td>0.119***</td>
<td>0.148***</td>
<td>0.052</td>
<td>0.088**</td>
<td>-0.015</td>
<td>0.247***</td>
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<td>9.</td>
<td>Number of bidders</td>
<td>1.014</td>
<td>0.133</td>
<td>-0.003</td>
<td>-0.013</td>
<td>0.008</td>
<td>0.074*</td>
<td>-0.015</td>
<td>-0.003</td>
<td>0.072*</td>
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<td>10.</td>
<td>Tender offer</td>
<td>0.087</td>
<td>0.283</td>
<td>-0.035</td>
<td>-0.056*</td>
<td>-0.033</td>
<td>-0.011</td>
<td>0.052</td>
<td>0.103**</td>
<td>-0.022</td>
<td>-0.204***</td>
<td>0.136***</td>
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<td>11.</td>
<td>Technological relatedness</td>
<td>0.332</td>
<td>0.471</td>
<td>0.078*</td>
<td>0.087***</td>
<td>0.007</td>
<td>-0.037</td>
<td>-0.100</td>
<td>-0.134***</td>
<td>0.088**</td>
<td>0.050</td>
<td>0.012</td>
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† p < 0.1
* p < 0.05
** p < 0.01
*** p < 0.001
Table 2
R&D Expenditures and Post-acquisition Performance

<table>
<thead>
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<th>Dependent variable = Salesgrowth&lt;sub&gt;Post&lt;/sub&gt;</th>
<th>[1]</th>
<th>[2]</th>
<th>[3]</th>
<th>[4]</th>
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</thead>
<tbody>
<tr>
<td>Relative transaction value</td>
<td>0.058*</td>
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<td>0.059*</td>
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<td>Portion of stock paid</td>
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<td>0.039†</td>
<td>0.038*</td>
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<td></td>
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<td>Number of bidders</td>
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<td>0.090**</td>
<td>0.094*</td>
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<td></td>
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<sup>†</sup> p < 0.1
<sup>*</sup> p < 0.05
<sup>**</sup> p < 0.01
<sup>***</sup> p < 0.001
INTREPRENEURIAL LEADERS AND PERFORMANCE

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ABSTRACT

Intrepreneurship (entrepreneurship inside of an organization) has had a rich history in literature (Pinchot, 1984). Since the 1990s, the idea of innovation across all levels in the organization has been put into practice (Howell & Higgins, 1990). Logically then, organization leaders should have been encouraged to acquire innovation skills or the skills of the intrepreneur. The question is, do these intrepreneurial leaders impact organizational performance and personal performance? How does a preference for uncertainty or ambiguity reduction impact this relationship? This paper develops the idea of the intrepreneurial leader and proposes conditions under which such a leader might be successful.

INTRODUCTION

Intrepreneurship (entrepreneurship done within an existing organization) has been studied for over a quarter of a century (Pinchot, 1984). The reason for including an intrepreneurial focus was to increase the innovativeness of an organization and ultimately performance (Luchsinger & Bagby, 1987). Since this initial call went out in the late 80s, innovation was explicitly included in the competing values framework for leadership and managerial behaviors (Quinn, Faerman, Thompson, & McGrath, 2003). This implies that the behaviors of the intrapreneur have migrated into our expectations of what it means to be a leader within an organization.

Intrapreneurs are risk takers. When we look at leaders with a skill set related to innovation, are they also risk takers? Does preferences for handling uncertainty impact the performance results of innovation leaders differently than preferences for handling ambiguity reduction? Do any impacts vary by level of performance (individual versus organizational)? What makes an innovation leader and intrepreneurial leader? This paper examines these questions and provides an answer based on several organizations found in the southwestern part of the United States.

This paper begins with describing the innovator role of a master manager found in the competing values framework. A model of an intrepreneurial leader is developed. Next, we describe a context that should support innovations including the concept of entrepreneurial conation. We then present a structural equation models that examine our questions. The paper finishes with the result of the model testing on the data from the organizations in a southwestern community and the resulting implications for researchers and practitioners.
LEADERS & INNOVATION

We acknowledge that there are ongoing debates between what are leadership behaviors and what are managerial behaviors (this began with Zalenik, 1977). Our perspective is that in contemporary organizations a more balanced perspective is appropriate and so we follow others and include both leadership and managerial behaviors (Bass, 1985, Kotter, 1990, Black, Oliver, Howell & King, 2006). While several combinations of leader and managerial behaviors are available, we choose to base ours on the competing values framework (CVF) (Quinn et al., 2003). We begin by examining the various leader roles found in CVF.

Leaders

The competing values framework has eight roles that a master manager can successfully handle (Mentor, Facilitator, Producer, Director, Coordinator, Monitor, Broker & Innovator (Quinn et al., 2003). The questionnaires identifying the roles have validity (Denison, et al., 1995) and confirmation that effective leaders do possess higher levels of behaviors (Hart & Quinn, 1993; Hooijberg, 1996). Thus, there is existing evidence that innovation is an integral part of the best managers.

These roles have behaviors associated with them. The mentor’s set includes having insight into yourself and others, being an effective interpersonal communicator, and knowing how to develop your subordinates (Quinn, et al., 2003). The facilitator’s role focuses on group level phenomena and includes knowing how to engage in building teams, involving others in decision making, and managing conflict (Quinn, et al., 2003). As a producer, the leader is expected to be personally productive, supporting a positive and productive working environment, and managing time and stress (Quinn, et al., 2003). The set of skills involved in the director role includes having and communicating a vision, being capable of setting goals and objectives for others along with designing effective strategic organizational design and authority flows (Quinn, et al., 2003). In the coordinator’s skill set are such skills as being a project manager, designing work flows and helping bridge across various functional areas (Quinn, et al., 2003). Given the importance of control issues in organizations, it is no surprise that in the monitor’s role are skills such as determining performance and quality levels, being able to manage information overload and capable of analyzing core processes with a goal of continuous improvement (Quinn, et al., 2003). The leader also needs to be able to cross boundaries and acquire resources easily. This skill set is found in the broker’s role and includes being a negotiator, being skillful in networking and managing power and influence relationships and simply being persuasive when making presentations(Quinn, et al., 2003). Finally, the innovator role emphasizes creativity and managing change both at an organizational level and at a personal level (Quinn, et al., 2003).

Given the comprehensive nature of the CVF and its inclusion of behaviors from the traditional planning, organizing, leading, controlling framework, we believe that it is a good basis for us to use as we examine a leader and innovation or entrepreneurship.
Intrepreneurs

Intrepreneurs are organizational members who arise from the general population of employees in response to corporate innovation initiatives (Amo & Kolvereid, 2005). They thrive given a corporate culture in which they engage in relatively low risk entrepreneurial activity since they have room to fail but still remain employed (Seshadri & Tripathy, 2006). Since the conditions which sparked the interest in intrapreneurship have not dissipated but rather intensified (global competition, ongoing technology innovation and so forth), innovation behaviors found in both intrapreneurs and leaders remain an important area of research. We proceed to introduce the skills and orientations of intrepreneurs by comparing them with general management leaders.

Being an innovative manager (being creative and managing change across levels of analysis) may not be the same thing as being an intrepreneur or intrepreneurial manager. Both managers and intrepreneurs have good organizing skills, interpersonal skills including effective communication skills and being resourceful and goal oriented (Davis, 1999). An interesting attribute in the light of more recent corporate scandals is that both are ethical (Davis, 1999). Perhaps not so surprising given the most recent recession is that both can handle stress and are willing to take well-calculated risks (Davis, 1999).

While there was a lot in common between leaders and intrapreneurs, there are also differences. Unlike general managers, intrepreneurs tend to be visionary with a sense of urgency and unconventional initiative with creativity and resilience (Davis, 1999). Furthermore, the intrepreneur is expected to be sensitive to the current corporate culture with respect to starting new ventures and establishing a supportive network within the corporation (Koen, 2000, Honig2001). Intrapreneurs are innovative and creative but they are need to deliver a successful project (Luchsinger & Bagby, 1987). This need for successful completion means that the intrapreneur will need to be effective in handling change and innovation (Luchsinger & Bagby, 1987). Since all of this occurs in a social environment, there is also the potential for high levels of ambiguity (Czernich, 2003).

The intrepreneur, contrary to most perceived established risk adverse organizational cultures, is expected to promote risky and even tangential ideas relative to the firm’s established base. To successfully do this, the intrapreneur must be persuasive, dedicated and persistent. Being persuasive means that the intrapreneurs can competently frame the entrepreneurial idea so that an organization can accept it (Czernich, 2003). Having negotiated a successful acceptance of an innovative project by the organization does not mean that will inevitably be successful in the market; these are still risky propositions (Czernich, 2003). Thus, the ability to take action in the face of risk is important and integral to the intrepreneurial focus. Intrepreneurs are recognized idea generators but their link to nurturing for successful implementation was just recently acknowledge (Seshadri & Tripathy, 2006). This implies that intrapreneurs may need strong leadership skills too.

The Intrepreneurial Organizational Leader

To determine what comprises the intrepreneurial organizational leader, we will look to see what roles best fit with the earlier definition of an intrepreneur. We will also need to examine an
appropriate organizational context and the intrepreneur’s orientation towards taking action under differing conditions of risk and ambiguity.

**Leader Roles and the Intrepreneur.** In the classical view, organizational innovativeness includes two sources; innovation (Baker & Sinkula, 2009) and product innovativeness (Wang & Ahmed, 2004) as strategies to improve an organization’s effectiveness. Intrapreneurs are responsible for much larger scale innovation (Czernich, 2003). Innovation requires a break with in status quo of the culture, processes, developments, and delivery of products and services (Baker & Sinkula, 2009) to have any success in the innovative initiative. Leaders thus need to be supportive of divergent thinking. Therefore, if we expect that the innovative expectations embodied by an intrapreneur have become embedding in the general construct of what it is to be a leader; then we anticipate that it is found in this dimension of innovation as posited by the competing values framework.

This applied innovative orientation means that the skills of the innovator role are widely in use by an intrepreneur. There was also the recognition of the ability of the intrepreneur to convince others to enable the time to do the innovation generation and the resources to implement it; thus, we also see the skill sets of a broker being very important. In addition to these personal skill sets, it appears that the intrepreneur requires an organizational context to both be innovative and to test the innovation without excess fear of the results of failure. The other roles while having one or two behaviors that are desirable do not have a majority of their associated roles required by an intrepreneur; therefore, in terms of full sets of behaviors, we link the innovation and broker role to an intrepreneurial leader’s action set (See Figure 1.)

**Organizational Context.** Supporting change and innovation thus becomes an important part of the leadership’s tool set when striving for increased innovation within a firm. An organizational context that supports these types of directed change experiments is desirable. On such context found in a recent leadership article and verified through research beginning in the mid-1990s is that of an organizational context for change (Black, et al., 2006). This socially created organizational context includes four constructs that are thought to influence the work environment in a holistic fashion. These four constructs are trust, stretch, discipline and support.
Trust is a construct that has many definitions. Black and colleagues (2006) use one that includes the interaction between the individual and the organization. It includes perceived equity by the individual about organizational actions; the individual’s choice for involvement with the organization beyond the minimum required for their position as an action choice reiteration of that individual organizational interaction and finally, the individual’s commitment to personal excellence as a way of showing reciprocity in the organization-individual trust cycle.

Stretch is construct that reflects individuals’ willingness to go the extra mile for the organization. Stretch begins with a link between the individual and the organizations goals such that the individual finds personal meaning in those goals (Black, et al., 2006). The construct includes the degree to which the individual has embedded organizational identity characteristics into their own personal identity structure (Black, et al., 2006). The last construct is that of shared ambition where personal passion and drive towards goals mirrors the passion and drive for the organization’s strategic goals found in the organization.

Discipline is best described as responsibility and directed action taking at an organizational level. The construct begins with having clearly communicated goals (Black, et al., 2006). There is then fast feedback about one’s efforts to reach those goals (Black et al., 2006). One also sees a commitment to those goals by the managers of the organization (Black et al., 2006) and a willingness to both reward and punish in ways that result in consistently directing people towards those organizational goals (Black et al., 2006).

Support, the last category in the context, examines the perceived amount of enabling efforts on the part of the organization for an individual to reach personal work goals. Again it addresses support issues at multiple levels. Personally, it looks at the degree of autonomy present for the trained or experienced worker (Black, et al., 2006). At a group level, the amount of between group cooperation in reaching goals is addressed (Black, et al., 2006). At an management level, there is the individual’s perception of the amount of guidance and help provided by the individual’s supervisor (Black et al., 2006).

These four constructs are thought to operate holistically and thus all need to be present to support organizational and personal learning in an organizational context (Black & Boal, 1997). Put another way, work relationships like productivity are thought to be enhanced when in the presence of these four constructs. That being the case, then, we expect that the perception of high levels of trust, stretch, discipline and support by the intrepreneurial leader’s followers will also provide a successful environmental condition for an intrepreneur.

Figure 2: Model of Context-for-Learning and Intrepreneurial Performance

![Figure 2](image_url)
**Orientation Towards Action Taking.** Each person has a preferred way of taking action when motivated to act (Berry, 1996). Innovation implies risk and intrepreneurship implies taking action in a wide range of risky conditions with various levels of uncertainty and ambiguity being present. Questioning the status quo is a basic prerequisite for creativity and innovation. Being willing to put something out for the market to judge is an example of risk taking. Addressing a problem in a new way is another example.

Rogers (2003) postulated that there are individual members of a social system who are predisposed to be innovative and will adopt an innovation sooner than those who are not. The tendency of members of a social system to adopt innovations was classified into five categories according to the amount of time passing from innovation availability to adoption: 1) Innovators (2.5%), 2) Early Adopters (13.5%), 3) Early Majority (34.0%), 4) Late Majority (34.0%), 5) Traditionalists (16.0%). The proportion of members of a social system falling into each of these categories appears in parentheses above. Note that Rogers’ label for the fifth category is actually Laggards, but Traditionalists has been used in prior research at the behest of research participants (Latta & Twigg, 2008). At one end are the risk takers or pioneers who adopt innovations early; while, opposite are those who resist adopting innovations for a long time, if they ever adopt.

These categories of market adoption have a mirrored side with the entrepreneurial endeavor offerer (typically an entrepreneur but in this instance the intrepreneur and by extension the intrepreneurial leader) willingness to take action in conditions with a wide range of ambiguity and uncertainty called entrepreneurial conation (Berry, 1996; Black & Farias, 2005). Conation means the volition to take action (Berry, 1996). Entrepreneurial conation means the volition to take market coordinating action under differing levels of ambiguity and uncertainty. This latter category is based on each intrepreneur’s action taking preferences with regard to handling ambiguity and uncertainty (Black & Farias, 2000). Ambiguity and uncertainty were conceived of as separate dimensions. One dimension had ambiguity reduction as a preference and the other had uncertainty reduction as a preference (Black & Farias, 2000). Those with high levels of ambiguity reduction preferences are those that respond favorable to the idea of “defining the problem or market structure”. Moderate levels are those that respond to “modify or redefine the problem or market structure”. Those with low preference levels of ambiguity reduction prefer to “adopt the existing problem or market structure”. Those three levels with uncertainty reduction have the corresponding orientations of “proactively seek ways to solve the problem”, “react to other’s attempt to solve problem”, “maintain the status quo”. These in combination fit nicely with Roger’s five categories but are at the individual level.

At the market level, an investigation of new businesses reported in popular entrepreneurial magazines like *Inc. and Entrepreneur* showed that the majority reported at this national level were oriented to preferring to deal with high levels of uncertainty across all levels of ambiguity (Black & Farias, 2005). Local organizations found from examining local newspapers were found in all levels of uncertainty reduction preferences and low to moderate levels of ambiguity reduction but rarely found in high levels of ambiguity reduction (Black & Farias, 2005).
This implies that the entrepreneurial conation preferences of intrepreneurs will also mediate their action choices as they as they receive feedback about their action choices. Furthermore, we expect that entrepreneurial conation preferences of the followers have an impact as they attempt to incorporate the intrepreneurial leader’s direction in the work environment (See Figure 3).

### PROPOSITIONS

Because of the holistic orientation of the Context-for-Learning we deemed it appropriate to present this model of an intrepreneurial leader and the leader’s impact on organizational performance using structural equation modeling framework. Thus, our entire set of propositions is presented in the form of a structural equation modeling diagram. We will present two models, one that presents the general flow of influence from a leader through followers to performance, and one that emphasizes the flow from an intrepreneurial leader where certain follower perceptions are emphasized and other attributes of the environment are minimized. In other words, we propose the investigation of the holistic presentation of the Context-for-Learning to determine if that does indeed result in a better model than the qualities described earlier. In the models, Innovator is abbreviated Inn. Broker is abbreviated Bro. a leader’s conation orientation is looked at with uncertainty reduction (Luc) preferences separate from the leader’s ambiguity reduction preferences (Lam). The leader’s perceptions of the context for learning will also be at the level of the embedded constructs. The leader’s perception of trust (Ltru), stretch (Lstre), discipline (Ldisc), and support (Lsup) are all show separately. The same is true for the followers’ perception of the context for learning dimensions (Ftru, Fstre, Fdisc, Fsup) and conation preferences (Func, Fam). Performance will be shown only at the organizational level (Perf).
The Base Theoretical Structural Equation Model

The base theoretical model shows the composition of the intrepreneurial leader (ILead) and their intrepreneurial action influences on performance mediate by their followers’ perceptions of Context-for-Learning and Entrepreneurial Conation orientations. That performance influences the intrepreneurial leader’s choices mediated by the leader’s perceptions of the Context-for-Learning and their personal Entrepreneurial Conation orientations.

**Figure 4: Base Theoretical Model**

The Intrepreneurial Leader Modified Theoretical Model

Recall from earlier that the intrepreneur needs to be able to break from past processes, and cultures to craft a new one (Baker & Sinkula, 2009) which requires a supportive environment. This implies that an Intrepreneurial Leader needs for their employees to perceive that support to be in place and to trust that it is there. They need these perceptions in place more so than perceptions which lead to a retention of a commitment to the old organizational goals and ways of doing business. Thus, we propose that the intrepreneurial organizational leader needs the trust and support perceptions to be in place more than the leader needs the stretch and discipline perceptions to be in place.

Furthermore, because the intrepreneur while taking action based on an envisioned future is operating in an existing framework, the intrepreneur needs to be able to trust the organization to provide feedback when they are successful and when they fail (Luchsinger & Bagby, 1987). They need to be sensitive to the current culture while pushing the envelope ((Koen, 2000, Honig2001). They must be able to rely on support to pursue these new directions with less concern for failure than for innovative growth; thus they need to trust in their own abilities and involvement with the firm and that they will be treated equably (Seshadri & Tripathy, 2006). Since they are engaging in risky behavior, they also need to perceive that their own supervisors
are supportive of their efforts and that other organizational departments will be open to helping their innovative idea be implemented. Thus, we expect that the intrepreneurial leader is impacted a great deal by the performance level attained but through their perceptions of the discipline, trust and support. We propose the following model will be more effective for the intrepreneurial leader.

**Figure 5: Intrepreneurial Leader Modified Theoretical Model**

![Figure 5](image_url)

**CONCLUSION**

Given the widespread targeting of innovation and creativity as critical aspects in today’s MBA programs, understanding more about an intrepreneurial leader appears increasingly important. This theoretical paper begins a journey into investigating this construct and the conditions under which such a leader may be successful. It is also very interesting to note that the holistic attribute of the environment may also be tested. Does this entire environment need to be there? Are there significant differences between an environment that supports learning and change in general (Black and Boal, 1997) and one that supports the intrepreneurial leader?

While the actual investigation of the relationships has yet to be done some of the issues brought up are very critical for the investigation of an intrepreneurial leader. Just how different is this intrepreneurial leader from an emergent intrepreneur? How does this construct differ from the entrepreneur? How does it differ from the emerging entrepreneurial leadership literature (Hitt, et al., 2011)? These considerations are some that are worthy of future investigation.
REFERENCES


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BALANCING MEDICAID, UNCOMPENSATED CARE, AND QUALITY:
AN ASSESSMENT OF CROSS-SECTIONAL DATA – 2006 - 2009
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ABSTRACT

Acute care hospitals in the United States today face a significant challenge in managing limited resources available to provide care to patients. Those resources may be even more constrained in a hospital that serves a relatively large proportion of Medicaid and uninsured patients, since reimbursements for care from these types of patients are significantly less than the costs of providing that care. At the same time, hospitals are starting to be held to objective quality standards in order to receive full payment for services by some insurers. This study evaluates the performance of hospitals on publicly available measures of quality when serving higher proportions of uninsured and Medicaid patients.

INTRODUCTION

The challenge of serving the poor continues to grow for providers and health care policy makers in the United States (Hsieh, Clement, & Bazzoli 2010; Andrews, Stull, Friedman, & Houchens 2007). Low reimbursements for services to Medicaid beneficiaries (Blue Cross, Blue Shield, 2008) or non-payment by the uninsured contribute to significant financial strains on hospital financial stability (Zwanziger, et al., 2010). Atmore accountable for demonstrated quality in the services they render to patients. Pay for performance (P4P) programs, such as that being implemented by the Centers for Medicare and Medicaid Services (CMS) place hospital providers at risk of lost reimbursements if quality does not meet established standards (Elliot, 2005). A difficult paradox thus evolves for hospitals in this nation – maintaining or improving quality of care while continuing to serve large proportions of patients that cannot fully reimburse the costs of their care. Assessing the extent to which a hospital’s burden of care to the poor may influence measured quality of care is the goal of this work.

BACKGROUND AND LITERATURE REVIEW

The decline in availability of employer-based health insurance along with a decline in general employment (Cunningham 2008) and reductions in payment rates for Medicaid services (Fronstin 2005) form a multi-faceted challenge to health care providers today. Medicaid payment rates have been estimated at approximately 87% of the costs of care (Blue Cross Blue Shield, 2008) and the uninsured may contribute even less toward the costs of their care (Cram, et al., 2010), thus posing a significant resource challenge to hospitals serving large proportions of these patients. Limitations in available resources for patient care may adversely impact the quality of care provided to all patients in a hospital (Dranove & White, 1998; Zwanziger, et al., 2010). Consequently, assessment of a potential linkage between the resource constraints imposed by serving higher proportions of Medicaid and uninsured patients and measured levels of quality of patient care could be formed on a basis of resource dependency theory.
Hospitals may not be able to control the environmental factors that drive the proportion of patients seeking care, given the requirements of the Emergency Medical Treatment and Active Labor Act (EMTALA). In view of this legal constraint that compels hospitals to provide at least medical stabilization services to any patient without consideration of ability to pay, they may be forced to respond by limiting resources devoted to patient care services. This adaptive response would be consistent with the tenets of resource dependency theory (Hatch, 1997; Zinn, et al., 1998; Proenca, et al., 2002; Scott, 2003; Kim, et al., 2009; Kazley and Ozcan, 2007).

There is ample evidence of such adaptive behavior noted in the literature to date. Dranove and colleagues (1998) observed that hospitals serving larger proportions of Medicaid patients tended to decrease the quality or number of services provided to all patients if unsuccessful in shifting unreimbursed costs of care to other payer sources. Zwanziger and his colleagues (2010) posited that hospitals engaged in higher levels of safety net activities – inclusive of serving Medicaid and uninsured patients – maintained relatively stable financial performance at the expense of lower quality of care. Jha and colleagues (2009) noted poorer quality in hospitals that received high levels of Disproportionate Share Hospital (DSH) reimbursements (a measure of the proportion of poor patients served) as a part of an evaluation of EHR adoption in safety net hospitals. A similar response was suggested in Volpp et al. (2005) in their evaluation of the effects of limited cost shifting as an adaptive response by hospitals in markets with higher competition for access to higher paying, commercially insured patient volumes. However, these works did not specifically address the types of resources reduced or constrained by hospitals in response to the challenges of lowered reimbursements from Medicaid and uninsured patients.

A specific adaptive strategy suggested to respond to resource constraints posed by serving such patient populations was limitation of staffing resources provided to delivering care by hospitals facing revenue constraints under the Balanced Budget Act (Lindrooth, et al., 2006). This work posited a relationship between reduced staffing levels and reduced quality of care. A general relationship Weiss and colleagues (2011) noted reduced staffing levels as an adaptive response in hospitals with an adverse impact on the quality of patient readiness for discharge. Similarly, hospitals in the State of California adapted to mandated nurse staffing ratio regulations by reducing resources available to provide care to the indigent and poor in Reiter et al. (2011). These observations seem of interest in the context of a relationship between increased delivery of care to Medicaid and uninsured patients in light of work by Blegen and colleagues (2011), where it was noted that patients in hospitals serving predominantly poor populations had poorer outcomes, but increased staffing was thought to mitigate that effect in some hospitals. As a result, there may appear some relationship between hospitals adapting to increased volumes of Medicaid and uninsured patients by reducing staffing levels and in so doing, sacrificing the quality of care provided. In an era of pay for performance incentives, this may represent a strategy that ultimately has an adverse impact on future revenues and furthers the need to constrain labor resources devoted to patient care – resulting in a possible “spiral” to financial difficulties.

Though much has been written about the plight of hospitals in a “safety net” role – serving larger proportions of patients with Medicaid and the uninsured – little has been noted that comprehensively links that role to a broad measure of quality over a nationwide cross-section of hospitals. The work here has focused on specific groups of hospitals in specific regions of the United States (Blegen, et al., 2011; Reiter, et al., 2011; Volpp, et al., 2005) and so faced some
limitation in generalizability to other areas of the nation. Also, the types of hospitals assessed tended toward academic medical centers (Volpp, 2005; Blegen, et al., 2011). Further, the quality measures used in other works focused on specific medical conditions (Blegen, et al., 2011) or hospital mortality (Volpp, et al., 2005). Some works evaluated quality of care using the clinical conditions monitored under the CMS Hospital Compare database which encompass process measures for care rendered to patients with acute myocardial infarction, congestive heart failure, pneumonia, and patients receiving surgical services (Jha, et al., 2009; Weiss, et al., 2011; Cram, et al., 2010).

Some work noted here evaluated the extent of a hospital’s safety net role on the basis of survey results (Londrooth, et al., 2006), proportion of patient discharges or patient days provided for Medicaid or uninsured patients (Volpp, et al., 2005), or the amount of Disproportionate Share Hospital (DSH) payments received by a hospital (Blegen, et al., 2011; Kazley and Ozcan, 2007; Jha, et al., 2009). The amount of charges in hospitals for patients covered by Medicaid, local indigent care programs, or the uninsured as a percent of total patient charges for that hospital was a metric used by Kim and colleagues (2009). Also, the work here appears to broadly categorize hospitals as “safety net” or “non-safety net” and does not consider the relationship between levels of services to Medicaid or uninsured patients in hospitals in a linear fashion, where the impact of resource constraints imposed on hospitals serving relatively lower proportions of these patients.

This work identifies an opportunity to longitudinally evaluate a national cross-section of hospitals for the extent of any association between the proportion of services rendered to Medicaid or uninsured patients and measures of quality, across a multi-year time frame. This work therefore seeks to identify and better understand the relationship between these metrics in United States hospitals.

RESEARCH QUESTIONS AND HYPOTHESES

A general pattern of findings does appear to emerge from the literature evaluating relationships between safety net missions and quality, where a greater proportion of services to patients with Medicaid or the uninsured could have an adverse impact on measures of quality of care. The uniformity of quality measures used across studies and the generalizability of that work across multiple years appears still at issue. Much of the work evaluating quality has used the CMS Hospital Compare database as an objective source of quality data and seems appropriate in this work (Lutfiyya, et al., 2007). Thus, the first research question to be addressed here is:

*Does an increase in the proportion of patients with Medicaid or no insurance served by a hospital adversely impact quality as measured by CMS Hospital Compare data across U.S. hospitals over a period of more than one year?*

Use of reduced levels of staffing has also been noted as an adaptive strategy by hospitals seeking to maintain financial viability in the face of constrained reimbursements associated with larger proportions of patients with Medicaid or no insurance. The extent to which that adaptive strategy is used has been surmised to adversely impact measured quality of patient care. So, a second research question to be addressed here is:
Do changes in staffing levels associated with increased proportions of patients with Medicaid or no insurance have an adverse impact on quality as measured using the CMS Hospital Compare data?

The literature noted here suggests that increased proportions of patients with Medicaid or no insurance is associated with poorer performance on quality measures. That general observation suggests the following primary hypothesis:

\[ H_1 - \text{Increased proportions of services rendered to patients with Medicaid or no insurance reduce measured quality in hospitals.}\]

This hypothesis would be accepted with a statistically significant association between a higher percentage of services provided to Medicaid or uninsured patients in hospital and lower measures of quality in those hospitals.

A second hypothesis arising from the background work reviewed here is:

\[ H_2 - \text{Decreased staffing levels in hospitals with increased proportions of services rendered to patients with Medicaid or no insurance reduce measured quality in hospitals.}\]

This hypothesis would be accepted if statistically significant associations between lower levels of staffing, higher proportions of services provided to Medicaid or uninsured patients, and lower measured quality in those hospitals were noted.

The methods by which these questions are addressed in this work are evaluated in the following section.

**METHODS**

This paper will use a least squares regression approach to evaluate the hypothesized relationships set out here. The data needed to model the relationships hypothesized here are available through publicly available sources. As mentioned in the previous section, the CMS Hospital Compare database provides data on the quality of care across multiple clinical conditions and is available for the majority of hospitals across the United States across multiple years (Lutfiyya, et al., 2007). Data is available that encompasses acute myocardial infarction, congestive heart failure, pneumonia, and surgical services for the years 2006 - 2009 and will be used in this work.

The Hospital Compare database captures performance data on processes associated with better patient outcomes for multiple clinical conditions. However, the data does not present one comprehensive measure of quality across all conditions measured. In the interest of evaluating overall quality in this work, a weighted average of performance for all conditions was used here. Such an approach is consistent with that used by Jiang and colleagues (2009) in evaluation of quality of care oversight in hospitals. This composited measure of quality will be used as the dependent variable in this analysis.

Levels of staffing in a hospital should take into account the myriad outputs of inpatient, outpatient, and emergency room services as well as the multiple labor inputs including nurses, technicians, therapists, and ancillary department staff. A comprehensive measure encompassing the multiple inputs and outputs of the hospital is the full-time equivalent (FTE) employees per adjusted occupied bed (AOB) or FTE/AOB (Zhao, et al., 2008; Lindrooth et al., 2006). Data to calculate values for this variable were obtained from Medicare cost reports filed by each hospital for cost report periods of a full year in length. This convention was adopted to avoid any
potential seasonality biases from using partial year cost reporting periods that could be influenced by high or low utilization periods of the year.

The extent of service to patients with Medicaid or with no insurance is evaluated by using the charges for such patients as a percentage of charges for all patients in the hospital. While other studies used measures of inpatient volume or DSH payments, those measures did not assess the overall proportion of services provided to Medicaid or uninsured patients. Since services could be provided to patients in a hospital through multiple avenues (inpatient, outpatient, or the emergency room), charges establish a relative value of each service provided to the patient. The amount of charges billed for services to patients with Medicaid or the uninsured as a percentage of charges billed to all patients provides a measure of the proportion of all services to these targeted subgroups of hospital patients.

Other categorical variables such as hospital ownership, teaching status, rural location, multi-hospital system affiliation, and bed size could also be influences on the relationships posited here and are included in the model evaluated here. Hospital ownership was evaluated using a dummy variable where the base case was non-profit ownership and other categories were set up for for-profit ownership and local government ownership. The teaching status, rural location, and multihospital affiliation variables were binary with a value of 1 assigned if the hospital had a physician teaching program, designated as a rural facility by CMS, or was a member of a multi-hospital system respectively. Bed size was measured using the hospital’s licensed bed capacity. Data for these variables were also obtained from Medicare cost reports filed by each hospital during the years included in this study. Case mix index – a relative measure of the average severity of patients served by a hospital – could also exert an influence on the model and values obtained from CMS for each hospital for each year included in this analysis.

RESULTS

There were 4,406 records created for this analysis, with a record being comprised of available data for all variables in the Medicare Cost Report filed for a full 365 day fiscal year period, quality measure values from Hospital Compare database, and a published value from the CMS case mix index published files. Summary descriptive statistics for numeric variables in the study population are presented in Table 1 below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Average Quality Score</td>
<td>0.879</td>
<td>0.075</td>
<td>0.021</td>
<td>1.000</td>
</tr>
<tr>
<td>FTE/AOB</td>
<td>5.346</td>
<td>1.277</td>
<td>2.530</td>
<td>14.470</td>
</tr>
<tr>
<td>Percent of Revenue From Medicaid and Uninsured Patients</td>
<td>0.185</td>
<td>0.127</td>
<td>0.000</td>
<td>0.984</td>
</tr>
<tr>
<td>Licensed Bed Capacity</td>
<td>205.854</td>
<td>177.880</td>
<td>4.000</td>
<td>1775.000</td>
</tr>
<tr>
<td>Case Mix Index</td>
<td>1.412</td>
<td>0.268</td>
<td>0.001</td>
<td>3.089</td>
</tr>
</tbody>
</table>
Descriptive statistics for categorical variables in the study population are noted in Table 2 as follows.

### TABLE 2

**Descriptive Statistics for Categorical Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-Profit Ownership</td>
<td>865</td>
<td>3,541</td>
</tr>
<tr>
<td>Other Government Entity Ownership</td>
<td>651</td>
<td>3,755</td>
</tr>
<tr>
<td>Teaching Hospital</td>
<td>565</td>
<td>3,841</td>
</tr>
<tr>
<td>Multi-Hospital System Affiliated</td>
<td>1,472</td>
<td>2,934</td>
</tr>
<tr>
<td>Rural Location</td>
<td>875</td>
<td>3,531</td>
</tr>
</tbody>
</table>

The regression model proposed here was analyzed using the Stata statistical package and generated an r-squared value of 0.165. Rerunning the model with robust standard errors yielded an identical result, and a covariance matrix among all regression variables found minimal evidence of serial correlation in the model. Results of the model run are depicted in Table 3 below.

### TABLE 3

**Regression Model Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Revenue From Medicaid and Uninsured Patients</td>
<td>-0.036</td>
<td>0.008</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>FTE/AOB</td>
<td>-0.000</td>
<td>0.001</td>
<td>0.785</td>
</tr>
<tr>
<td>For-Profit Ownership</td>
<td>-0.015</td>
<td>0.003</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Other Government Entity Ownership</td>
<td>-0.019</td>
<td>0.003</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Teaching Hospital</td>
<td>0.021</td>
<td>0.003</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Multi-Hospital System Affiliated</td>
<td>0.009</td>
<td>0.002</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Rural Location</td>
<td>-0.007</td>
<td>0.001</td>
<td>0.003</td>
</tr>
<tr>
<td>Licensed Bed Capacity</td>
<td>-0.001</td>
<td>&lt;0.001</td>
<td>0.037</td>
</tr>
<tr>
<td>Case Mix Index</td>
<td>0.094</td>
<td>0.005</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Constant</td>
<td>0.764</td>
<td>0.007</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Generally, significant relationships were observed between the proportion of hospital revenues from Medicaid or uninsured patients and observed measures of quality in hospitals, after controlling for ownership, location, teaching status, multi-hospital system affiliation, capacity, and case mix. Here it appears that a one percent increase in the Medicaid/uninsured proportion of total charges leading to a three percent decrease in that hospital’s weighted average score on its
Hospital Compare quality measures. This finding appears consistent with other findings in the literature and lends support to accept the proposal in $H_1$.

Also observed in this model was a statistically insignificant relationship between the proportion of hospital revenues from Medicaid or uninsured patients and levels of FTE/AOB staffing. Thus, there appears little evidence among the hospitals in this study to support the notion that increased utilization by these categories of patient have translated to staff resources adversely impacting observed quality, after controlling for ownership, location, teaching status, multi-hospital system affiliation, capacity, and case mix. Given this observation, $H_2$ as proposed here cannot be accepted.

Other observations noted in this model were statistically significant relationships between ownership, teaching status, case mix (all $p<0.001$), rural location ($p = 0.003$), and bed size ($p = 0.037$). The amount of decline in quality for an increase in the proportion of hospital revenues from Medicaid or uninsured patients appeared greater in local government operated hospitals than in for-profit hospitals (Government: $\beta = -0.0192$; For-profit: $\beta = -0.0153$). Multi-hospital system affiliation, teaching status, and case mix index appear to contribute to maintaining higher weighted average scores on Hospital Compare quality measures, despite the pressures imposed by higher proportions of utilization by Medicaid and uninsured patients. Observations noted in this analysis will be further examined in the following section.

**DISCUSSION**

Consideration of the model posited here suggests that the pressures of decreased reimbursements arising from greater proportions of Medicaid and uninsured patients at a hospital have an adverse impact on measures of quality using the Hospital Compare database. However the lack of a significant association between increased Medicaid and uninsured utilization and FTE/AOB staff levels indicate that adaptive strategies that entail reduced staffing do not appear to contribute to lower observed quality. In addition, observed model coefficients for ownership variables where declines in quality scores were lower in for-profit hospitals suggests that such organizations may have found more effective means of compensating for the financial strain of increased Medicaid/uninsured patient loads.

Sharing of resources among multi-hospital system affiliates and the presence of teaching physicians may be explanations for the observations of improved quality, despite increases in Medicaid/uninsured utilization. Increased case mix index values translating to higher weighted average scores on Hospital Compare quality measures may be explained by hospitals having advanced resources to treat more severe illnesses lead to improved levels of patient care quality. Conversely, operation of a hospital in a rural setting appears contributory to poorer performance on Hospital Compare quality measures. Since these hospitals tend to serve higher proportions of Medicaid and uninsured patients and have fewer resources available due to limited size, the challenge of maintaining higher quality performance appears magnified (Lee, et al., 2010).

There does appear some consistency in this model with the tenets of resource dependency theory. Increased constraint on collected hospital revenues arising from increased proportions of Medicaid and uninsured patients are manifested in lower performance on process quality measures. The type of resources actually limited by hospitals in this model are not clearly delineated, given the lack of a strong relationship between higher utilization by
Medicaid/uninsured patients, levels of staffing, and observed performance on Hospital Compare measures.

LIMITATIONS AND OPPORTUNITIES FOR FUTURE RESEARCH

This model is not without limitation as it is built upon secondary data using high-level performance metrics. The Hospital Compare database focuses on process of care quality measures and may not be able to identify other challenges or contributors to quality in hospital care. Also, while use of billed charges as a measure of relative resource allocation can be illustrative within a hospital, large variances in pricing practices among types of charge items could skew percentages calculated in this model. Finally, the use of the FTE/AOB metric as an overall measure of staffing levels may mask the effect of differences in employee skill mix that may be contributory to observed performance on the quality measures used here.

The observation of nominal impacts on quality by staffing levels merits further evaluation in view of hypothesized relationships between staffing levels and measures of quality in the literature. Also, the factors that link teaching status, multi-hospital system affiliation, and case mix index and higher quality performance merit further evaluation. Finally, further work is needed to identify factors that cause for-profit hospitals to have lesser declines in quality performance than government operated hospitals when faced with comparable levels of increase in Medicaid/uninsured patient utilization.

SUMMARY

From the hospital management perspective, it seems that higher levels of Medicaid and uninsured patient utilization must serve as a warning to decreased performance in quality measures assessed using the Hospital Compare data. In view of future plans to associate payment rates with higher quality performance, hospitals that serve higher levels of Medicaid and uninsured patients may be at even greater risk of lost revenues from other sources if quality performance observed here continues. Consequently, the need to help hospitals that serve proportionately more of the Medicaid and uninsured populations in the United States appears more acute. Managers must become more attentive to strategies that improve quality performance while limiting the drain on already significantly constrained hospital resources.

REFERENCES


PROACTIVE PERSONALITY AND CAREER FUTURE:
TESTING A CONCEPTUAL MODEL AND EXPLORING POTENTIAL MEDIATORS
AND MODERATORS

Veena P. Prabhu, California State University, Los Angeles; Email: vprabhu@calstatela.edu

ABSTRACT
Proactive individuals actively create environmental change, while less proactive people take a
more reactive approach toward their jobs. The extent to which individuals benefit from their
own pro-activity depends on the context. In today’s challenging times there are several factors
that can be a cause of concern for a proactive employee’s career future. The purpose of the
present study was two-fold: a conceptual model was proposed and tested. Secondly, the
mechanism (both mediation and moderation) was tested by which proactive personality is related
to career future via extrinsic factors—managerial communication and job performance and
intrinsic factors—job satisfaction and one’s intention to remain with the organization. The
conceptual model exhibited a robust fit. Both managerial communication and intent to remain
were strong predictors of career future. The results also supported the mediating role of all the
four factors. However, there was not support for the interaction effect. Implications for
organizations and future research are discussed.

Overview of Proactive Personality
Proactive behavior entails a dynamic approach toward work (Frese, Kring, Soose, &
Zempel, 1996; Parker, 2000) seeking to improvise the existing job along with developing
personal prerequisites for furthering career success (Seibert, Crant, & Kraimer, 1999) and
organizational effectiveness (Bateman & Crant, 1999). The extant work on proactive behavior
advocates the fact that the construct proactive personality explicitly encompasses the varied
aspects of proactive behavior and initiative (Crant, 2000).
Bateman and Crant (1993) defined the construct proactive personality “as a dispositional
construct that identifies differences among people in the extent to which they take action to
influence their environment” (p. 103). They further developed the Proactive Personality Scale
(PPS) to measure this construct and provided evidence for the scale’s convergent, discriminant,
and predictive validity with results from three studies. Since then, a number of studies have
consistently demonstrated the validity of the proactive personality construct, as assessed by the
PPS (e.g., Becherer & Maurer, 1999; Bateman & Crant, 1999, Crant, 1995, 1996; Crant &
Bateman, 2000; Kirkman & Rosen, 1999; Parker & Sprigg, 1999).

Proactive personality is a unique disposition not captured by other typologies such as the
five-factor model; Crant and Bateman (2000) found only moderate correlations with the five-
factor model of personality. Furthermore, Crant (1995) found that proactive personality
predicted sales performance above and beyond conscientiousness and extraversion. Additionally, Bateman and Crant (1993) showed that proactive personality is distinct from self-
consciousness, need for achievement, need for dominance, and locus of control. All these
studies provide further evidence for the discriminant validity of proactive personality.

Research in understanding this construct has been rapidly increasing. Its effects have
been studied in varied fields such as career success (Erdogan & Bauer, 2005; Seibert, Crant, &
Kraimer, 1999), job performance through a social capital perspective (Thompson, 2005);
transformational (Bateman & Crant, 1993) and charismatic leadership (Crant & Bateman, 2000); and job search success (Brown, Cober, Kane, Levy, & Shalhoop, 2006). Chan (2006) has explored the interactive effects of situational judgment effectiveness and proactive personality on work perceptions and outcomes. Parker and Sprigg (1999) found that proactive personality moderated the interactive effect of job autonomy and demands on employee strain. Their results were consistent with the premise that proactive employees take advantage of high job control to manage the demands they face more effectively, whereas passive employees do not take advantage of greater autonomy to this end.

**Proactive Personality and Career Future**

An idea that has recently gained much ground is the notion that work design does not simply allow employees to apply knowledge they possess, but it also promotes knowledge creation, or employee learning and development. Research suggests that individual characteristics may be the strongest predictors of engagement in development activity (Maurer & Tarulli, 1994). Evidence is accumulating for this more developmental perspective. Studies have shown a link between the greater use of personal initiative (Frese, Kring, Soose, & Zempel, 1996) and the development of more proactive role orientations (Parker, Wall, & Jackson, 1997). This learning and developmental perspective is consistent with the German Action Theory (e.g., Hacker, Skell, & Straub, 1968) which is based on the ideology that work is action-oriented. More broadly, Action Theory is substantiated by the premise that: “the human is seen as an active rather than a passive being who changes the world through work actions…” (Frese & Zapf, 1994; p. 86).

People are not always passive recipients of environmental constraints on their behavior; rather, they can intentionally and directly change their current circumstances (e.g., Buss, 1987; Diener, Larsen, & Emmons, 1984). In dynamic circumstances which tend to be less well-defined, it is reasonable to assume that individuals might mold their work characteristics to fit their individual abilities or personalities. People with a proactive personality are relatively unconstrained by situational forces (Bateman & Crant, 1993). Readiness and determination to pursue a course of action is characteristic of proactive people which are also central to models of self-development (Antonacopoulou, 2000).

The words of Bateman and Crant (1999) capture the essence of proactive personality.

Proaction involves creating change, not merely anticipating it. It does not just involve the important attributes of flexibility and adaptability toward an uncertain future. To be proactive is to take the initiative in improving business. At the other extreme, behavior that is not proactive includes sitting back, letting others make things happen, and passively hoping that externally imposed change “works out okay.” (p. 63)

Careers have changed dramatically with advances in technology (Coover, 1995; Freeman, Soete, & Efendioglu, 1995; Howard, 1995; Van der Spiegel, 1995) and increased global competition (Rosenthal, 1995). Thus in today’s borderless world characterized by technological advances wherein companies are competing for survival the assumption that an organization would provide lifetime employment has undoubtedly become a myth—‘both parties know that the [employment] relationship is unlikely to last forever’ (Cappelli, 1999, p. 3). Add to this the element of change and that gives you the perfect recipe to a chaotic and uncertain
environment which in turn demands that employees start charting and navigating their careers. Thus there is renewed interest in the idea of individuals taking responsibility for their career with researchers investigating the effect of organizational change on careers (e.g., Sullivan, Carden, & Martin, 1998). In the present study we have concentrated on the construct of career future because in the backdrop of change, individuals are bound to be concerned about their job security and whether they anticipate ‘to climb the ladder’ if they continue to work for the same organization. Although the extant literature lacks an appropriate definition for the construct of career future we have operationalized it as an employee’s belief about having prospects for career advancement in the present organization.

**Conceptual Model of Proactive Personality and Career Future**

Campbell (2000) pointed out the possibility of proactive persons receiving negative reactions from the organization, and raised an important question: “Are employees’ enterprising qualities truly universally desirable, or do particular job and organizational circumstances make them relatively more or less valuable?” (p.57). Likewise, Frese and Fay (2001) proposed that there are limits to personal initiative, this is aptly termed by Campbell (2000) as the “initiative paradox”—where organizations on one hand encourage proactivity but fail to make room for the probable pitfalls such as misguided proactive (Bateman & Crant, 1999). For example, if proactive employees are not convinced that their career would prosper if they continued at the same organization, they would proactively search for new employers and avenues. Losing these employees would cost the organization time and money and this would be viewed unforgivably by management. It is, therefore, of vital importance to gain insight into understanding the mechanism by which proactive personality leads to career future. This entails investigating “how” or “why” (mediating effect) and “when” (moderating effect) does proactive personality lead to career future and other job outcomes (Crant, 2000; Erdogan & Bauer, 2005). Trying to understand these relationships and based on the extant literature of both organizational change and career lead to the development of a conceptual model of proactive personality and career future which included not only direct effects but also certain potential mediating effects (See Figure 1).

**Potential mediators and moderators in the relationship between proactive personality/career future**

Several authors have noted that understanding the strategies and behaviors applied by individuals to achieve career success is of vital importance (Bell & Staw, 1989; Judge & Bretz, 1994). In today’s competitive world where there has been an increasing emphasis on protean careers, boundaryless careers, and career self-management (Hall, 1996; Jackson, 1996; King, 2004) proactive personality perfectly fits the bill. In an interesting study by Seibert, Crant, and Kraimer, (1999) proactive personality was associated with career success even after accounting for predictors, such as demographics, human capital, motivation, type of organization, and type of industry. In another longitudinal study they also found proactive personality to be positively related to career initiative, which consequently has a positive impact on career progression and career satisfaction (Seibert, Kraimer, & Crant, 2001).

However, it is essential to note that research on proactive career behavior primarily focused on ‘bounded careers, that is, single-employer careers with the prospect of stable employment’ (Claes, & Ruiz-Quintanilla, 1998, p. 358). It would not be considerably wrong to conclude that the environment characterized by organizational change is the antonym of a stable
environment. In such a backdrop it would be logical to assume that employees would remain with the organization only if they were convinced that they do have a career future in the organization especially proactive employees. **FIGURE 1: Proposed Conceptual Model of the Effect of Proactive Personality on Career Future**

Although the bulk of past research has concentrated on the positive implications of proactive personality, it could have certain potentially negative implications, since the extent to which individuals benefit from their own proactivity depends on the context. Campbell (2000) pointed out the possibility of proactive persons receiving negative reactions from the organization, and raised an important question: “Are employees’ enterprising qualities truly universally desirable, or do particular job and organizational circumstances make them relatively more or less valuable?” (p.57). In the present context it may be plausible that if the proactive employees are not convinced that they have career future they may not only be proactive in leaving the job but also searching new jobs. Thus it is of vital importance to gain insight into understanding as to how proactive personality affects career future.

Based on the extant literature of both organizational change and careers we chose four factors—two extrinsic (managerial communication and job performance) and two intrinsic factors (job satisfaction and intent to remain with the organization).

**Dual role of Managerial Communication and Intent to Remain with the Organization**

Managerial communication is a significant factor in employees’ support for change which has gained importance in recent years is managerial communication, which is also predominantly vital in the entire organizational change process (Armenakis & Harris, 2002; Lewis, 1999). It is generally defined in terms of a process through which companies basically
prepare employees for change by stating and clarifying issues related to the change (Lewis, 1999). Communication helps employees to gain a better understanding for the need for change, as well as to have some insights on the personal effects which may be caused by the proposed change (Armenakis & Harris, 2002). The process perspective suggests that when employees receive adequate and suitable communication in a change context (i.e. appropriate justification for, and information about, the change and timely feedback), they will have more favorable attitudes toward the change which, in turn, provides them insights as to “how” and “when” their careers will be affected in the near future.

Past research in retention and turnover have treated an employee’s intention to remain with the organization as a criterion variable and rightly so as there are several factors that affect a person’s intention to stay with the company. However, once an employee has decided that he/she intends to remain with the company for varying reasons (personal or professional) intent to remain can also serve as a predictor. If an employee intends to stay he/she would take steps towards ensuring that they progress in their career. Hence, in the present study we propose and test that intent to remain acts as a predictor of career future.

The moderation framework refers to a situation that includes three or more variables, such that, the presence of one of those variables changes the relationship between the other two, while in the mediation framework there is a causal process between all three variables. From the above discussion we anticipate that managerial communication and intent to remain with the organization will act as both a mediator and moderator.

Hypothesis 1: Managerial communication will mediate the relationship between proactive personality and career future.
Hypothesis 2: Managerial communication will moderate the relationship between proactive personality and career future.
Hypothesis 3: Intent to remain with the organization will mediate the relationship between proactive personality and career future.
Hypothesis 4: Intent to remain with the organization will moderate the relationship between proactive personality and career future.

Job Performance and Job Satisfaction
The range of job-related outcomes usually considered in work design research has been criticized as being too limited. However, traditional outcomes such as job satisfaction (intrinsic) and job performance (extrinsic) will certainly remain central to the agenda; hence these two outcomes were chosen in the present study. Mainly, proactive personality has been related to extrinsic job-related outcomes such as job performance (Crant, 1995; Thompson, 2005), extrinsic career success, or actual advancements in salary and position (Seibert, Crant, & Kraimer, 1999; Seibert, Kraimer, & Crant, 2001).

Additionally, proactive personality has also been related to intrinsic career success, i.e. job and career satisfaction. Intrinsic success is also important because of its relation to life satisfaction (Lounsbury, Park, Sundstrom, Williamson, & Pemberton, 2004). In the present study job satisfaction was defined as an individual's global feeling about his or her job (Spector, 1997). Dispositional characteristics incline people to a certain level of satisfaction (see Bowling, Beehr, Wagner, & Libkuman, 2005).

Based on the above discussion we anticipated a meditational framework:
Hypothesis 5: Job performance will mediate the relationship between proactive personality and career future.

Hypothesis 6: Job satisfaction will mediate the relationship between proactive personality and career future.

METHODOLOGY

Research Setting and Participants

Cross-sectional data were collected from employees who work in the private sector in Israel. The main sectors represented in our sample are technology, pharmaceuticals, telecommunication, finance and aviation. The data were collected via a self-report online survey using the snow-ball effect. We initiated our survey administration process by sending an email information letter to 25 people in 14 private sector companies in Israel, inviting them to participate in the research study. These initial respondents were asked to disperse the survey to five other employees who worked with them in their company or to other workers in the private sector. This sampling methodology is referred to as the snow-ball effect. The email cover letter contained the link to the survey and a request not to answer the survey if the recipient was not working in the private sector in Israel. Because English is a second language in Israel and is actively used and spoken in the country’s business community, the contact email and the survey were distributed in the English language. Only employees with access to email and the internet were able to receive and answer the survey. The surveys were collected during the Summer of 2008. We collected 120 completed and usable surveys.

Prior to our data collection in Israel, we conducted a pilot study to test the reliability of the survey. We distributed the survey to 40 MBA students in a large, public university on the West Coast in the United States online via www.Zoomerang.com and in the classroom.

The respondents had an average age of 30 years. Of the 120 people surveyed, about 54% were female. About 59% of respondents had a Bachelor degree, 27% had a Masters degree, and only 3% had a post graduate degree. Of the 120 respondents, 23% were software engineers, about 17% customer service representatives, 15% sales and marketing people, about 8% human resource management people, 7% operations and logistics and about 6% in business development. Tables 1 and 2 provide a demographic and job positions profile of the respondents, respectfully.

Table 1: Demographic Profile of Survey Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64</td>
<td>53.33</td>
</tr>
<tr>
<td>Age</td>
<td></td>
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<tr>
<td>20-29 years</td>
<td>44</td>
<td>36.66</td>
</tr>
<tr>
<td>30-39 years</td>
<td>62</td>
<td>51.66</td>
</tr>
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</table>
## Table 1: Demographic Profile of Survey Respondents: Positions with Organization (Continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Position</td>
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<td></td>
</tr>
<tr>
<td>Software Engineer</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Manager</td>
<td>14</td>
<td>11.66</td>
</tr>
<tr>
<td>Sales/Marketing</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Customer Service</td>
<td>20</td>
<td>16.66</td>
</tr>
<tr>
<td>Operations / Logistics</td>
<td>9</td>
<td>7.5</td>
</tr>
<tr>
<td>Human resources</td>
<td>10</td>
<td>8.33</td>
</tr>
<tr>
<td>Business Development</td>
<td>7</td>
<td>5.83</td>
</tr>
</tbody>
</table>
Measures

Career Future
Career future was measured by using a part of the Index of Organizational Reactions (IOR) scale developed by Dunham and Smith (1979). The IOR assesses satisfaction with supervision, financial rewards, kind of work, physical conditions, amount of work, company identification, co-workers, and career future. Five items related to career future was used which were obtained from Cook, Hepworth, Wall, and Warr (1981, pp. 42-45). Several studies have used this scale reporting coefficient alpha values which ranged from .82 to .83 (Lee & Johnson, 1991; McLain, 1995; Taylor, Tracy, Renard, Harrison, & Carroll, 1995). The present study reported a Cronbach’s alpha of .84.

Proactive Personality
Proactive personality was measured by using the shortened version of Bateman and Crant’s (1993) 17-item Proactive Personality Scale (PPS) created by Seibert, Crant, and Kraimer, (1999). The shortened version consists of 10 items which were selected as they had the highest average factor loadings across the three studies reported by Bateman and Crant (1993). These three studies presented evidence for the scale’s reliability (Cronbach’s alpha across three samples ranged from .87 to .89, and the test-retest reliability coefficient was .72 over a 3 month period) and convergent, discriminant, and criterion validity. Seibert et al (1999) mentioned that the deletion of 7 items did not result in a major effect on the reliability of the scale (17-item α = .88; 10-item α = .86). These items were summed to arrive at a proactive personality score. Responses were indicated on a seven-point Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”), with such items as "I excel at identifying opportunities" and "No matter what the odds, if I believe in something I will make it happen." Internal consistency (coefficient alpha) obtained in the current study was .89, in line with that reported by Bateman and Crant (1993).

Managerial Communication
Managerial communication was measured by using a subscale of the Communication Satisfaction Questionnaire (CSQ) (Downs & Hazen, 1977). The CSQ is a 40-item instrument that has demonstrated a high degree of validity and reliability across a number of organizations, and in multiple contexts (Clampitt & Downs, 2004). Although several factors are identified by Downs and Hazen (1977) as indicators of overall communication satisfaction in the workplace, the focus of the present study was specifically related to the dimension that assesses employees’ satisfaction with communication with their immediate supervisor or manager. Specifically this dimension is identified as personal feedback in the original instrument. It assesses how satisfied employees are with information they receive about their job, recognition of their efforts, and how well supervisors understand problems faced by employees. A 7-point Likert response format (ranging from 1 = very dissatisfied to 7 = very satisfied) was used to measure employees’ satisfaction to the five items. Previous studies that have assessed the internal consistency of the individual dimensions of the CSQ have reported coefficient alphas of .80 (Pincus, 1986) and .84 (Crino & White, 1981) for the personal feedback dimension. A more recent study examining the psychometric properties of the CSQ (Gray & Laidlaw, 2004) reported a coefficient alpha of .86.
for the personal feedback dimension. The reliability found in the present study was in tune with these studies as Cronbach’s alpha was .90.

**Job Performance.**

Job performance was measured by using self-report scale which included 7 items and was a subset of the 20-item scale prepared by Williams and Anderson (1991). The Williams and Anderson (1991) scale was originally validated on 127 employees working in varied organizations. Factor analysis resulted in three distinct behavior factors—job performance being one of them. Example questions include “fulfills responsibilities specified in the job description” and “meets formal performance requirements of the job.” Items were summed to yield a total performance score for each employee. Reliability of the scale was in the present study was .92.

**Job Satisfaction.**

Job satisfaction was measured by using a nine item scale developed by Eisenberger, Cummings, Armeli and Lynch (1997). Respondents indicated the extent of their agreement with each item on a 7-point Likert-type scale (1 = strongly agree, 7 = strongly disagree). Cronbach’s alpha measured for this scale was α = .94.

**Intent to Remain.**

Employee’s intent to remain with the organization was measured using a scale from Robinson (1996). This four-item scale asked employees to respond to Likert-type questions about how long the employee intends to remain with the employer, the extent to which they would prefer to work for a different employer, the extent to which they have thought about changing companies, and one binary question (“If you had your way, would you be working for this employer three years from now?”). We found a rather modest reliability with Cronbach’s alpha measuring .68.

**Demographic data.**

The survey also included items inquiring about the subjects' age, gender, ethnicity, and job tenure. Gender was dummy coded 0 for female subjects and 1 for male subjects. (See Table 1 for a summary of the measures).

**Data Analysis**

Data for this study were collected anonymously. Anonymity provided benefits by potentially reducing the method bias (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Data were analyzed using Structural Equation Modeling (SEM) implemented in AMOS and hierarchical regression analyses (See, Barron & Kenny, 1986). First the model fit was tested using several confirmatory factor analyses and comparing the goodness of fit indices. SEM was used to validate the conceptual model. Both the meditational and moderational framework were tested using hierarchical regression analysis (See Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003; Frazier, Tix, & Barron, 2004; Holmbeck, 1997).

**Tests for Model Fit**

The first step in the data analysis process involved running several confirmatory factor analyses and observing the fit of the data by checking whether all the goodness-of-fit indices met the respective criteria.

The goodness of fit of the models was evaluated by using absolute and relative indices. The absolute goodness-of-fit indices which were calculated are (cf. Jöreskog & Sörbom, 1993) (a) the chi-square goodness-of-fit statistic and (b) the root-mean-square error of approximation
(RMSEA). Although the chi-square likelihood ratio is considered the most fundamental measure of absolute model fit, it is sensitive to sample size and thus, with larger sample sizes (more than 200), can result in significant values even when small differences exist between the model and the data (Anderson & Gerbing, 1988; Hair, Anderson, Tattham, & Black, 1998). The ratio of chi-square to degrees of freedom ($\chi^2$/df) has been suggested as an alternative, with values of 2.0 or less indicative of acceptable fit (Kline, 2005). The RMSEA is a measure of model discrepancy and takes into account the error of approximation in the population (Hu & Bentler, 1999). The relative goodness-of-fit indices which were computed are (cf. Marsh, Balla, & Hau, 1996) (a) the normed fit index (NFI) (b) the comparative fit index (CFI), and (c) the incremental fit index (IFI). The CFI is a measure of fit derived from the comparison of the hypothesized model to the independence model and adjusts for sample size. CFI values of 0.90 or greater are indicative of acceptable models (Hu & Bentler, 1999).

**Hypothesis Testing: Mediating and Moderating Effects**

In the present study the data was analyzed by using hierarchical linear regression. To test for mediation Barron and Kenny (1986) suggested a three-step procedure: 1) the mediator was regressed on the independent variable, 2) the dependent variable was regressed on the independent variable, and finally 3) the dependent variable was regressed on both the independent variable and on the mediator. However, to test for complete mediation the independent variable needs to be controlled in the third step. Hence a simple regression was performed for step one, but for steps two and three a hierarchical linear regression was employed. A formal test of the significance of mediation was provided by the Sobel test (1982) (see MacKinnon, Warsi, & Dwyer, 1995). Similarly for moderation, step 1 included only the IV - proactive personality and in step in addition to the moderator variable the interaction term was introduced. A significant interaction term provides support for the moderational framework. Following the regression analysis the slopes are calculated at low medium and high levels of the moderator variable.

**RESULTS**

**Descriptive statistics**

Table 2 displays means, standard deviations and correlations among all the variables. Correlations among the independent and mediator variables had a median value of .19 and a maximum value of .33, with a maximum variance-inflation factor less than 2; hence, multicollinearity was not a severe problem that would preclude interpretation of the regression analyses (Neter, Wasserman, & Kutner, 1983). Proactive personality was significantly and positively related to career future ($r = .37, p = .01$). Given the proposed mediational framework all the four factors—managerial communication ($r = .63, p = .01$); job performance ($r = .31, p = .01$); job satisfaction ($r = .59, p = .01$) and intent to remain with the organization ($r = .55, p = .01$) were significantly correlated with career future.

**TABLE 2**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Future</td>
<td>3.63</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Model Fit

The overall fit of the measurement model was assessed following the guideline suggested by Hair, Anderson, Tatham, and Black (1998, pp. 610-612). Separate confirmatory factor analyses (CFA) (implemented in AMOS 18) were conducted to assess the psychometric properties of the constructs and to establish a baseline model. Prior to performing the analysis, all negatively worded items in the scales of all the variables were reverse scored. For all the scales in this study the loading of one indicator was set for each factor to a fixed value of 1.0.

The goodness of fit indices for the baseline model exhibited a robust fit. The chi-square test was statistically insignificant, the chi-square degrees of freedom ratio was extremely favorable ($\chi^2 / df = .603$). The other fit indices also gave evidence of a robust fit (RMSEA = .00; NFI = .99; GFI = 99; AGFI = 96).

Managerial communication ($\beta = .47, p < .001$) and intent to remain ($\beta = .28, p < .001$) had a significant and robust relationship with career future and explained 45% of the variance in career future after accounting for job satisfaction, job performance and proactive personality. Proactive personality had a significant relationship with managerial communication ($\beta = .59, p < .001$) and job performance ($\beta = .28, p < .001$) and explained 34% and 38% of the variance respectively after accounting for the remaining variables in the model. Interestingly, proactive personality and managerial communication explained a whopping 60% of the variance in job satisfaction after accounting for job performance and intent to remain with the organization.

Hypotheses Testing

For testing meditational hypotheses 1 (managerial communication); 3 (intent to remain with the organization); 5 (job performance) and 6 (job satisfaction), which suggested the meditational framework in the relationship between proactive personality and career future, we proactive personality was first regressed on the mediator. This was followed by a two-step hierarchical linear regression (see Table 3, 4 & 5). In step one, proactive personality was regressed on career future, followed by step two wherein proactive personality was controlled and the mediator was introduced. Finally we calculated the Sobel’s test (Preacher & Leonardelli, 2001). Formula for the test was drawn from MacKinnon, Warsi, and Dwyer (1995). Table 3, 4, 5 summarizes the results of the regression analyses of managerial communication, intent to remain with the organization and job satisfaction respectively.
FIGURE 2: Baseline Model of the Effect of Proactive Personality on Career Future with Standardized Estimates
Note: PP = Proactive personality; CF = Career Future; JP = Job Performance; MC = Managerial Communication; JS = Job Satisfaction; IR = Intent to remain with the organization
### TABLE 3
Summary of Hierarchical Regression Analyses: Mediation of the Effect of Proactive Personality on Career Future by Managerial Communication

<table>
<thead>
<tr>
<th>Regression 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>ß</th>
<th>$\Delta R^2$</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Personality</td>
<td>.59***</td>
<td>.35***</td>
<td></td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Regression 2&lt;sup&gt;b&lt;/sup&gt;</th>
<th>ß</th>
<th>$\Delta R^2$</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.14***</td>
<td>.14***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>.37***</td>
<td>.28***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>.00</td>
<td>5.24</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Managerial communication</td>
<td>.63***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Dependent variable is Managerial Communication  
<sup>b</sup>Dependent variable is Career Future  
*Note. N = 120. *** p < .001.*

### TABLE 4
Summary of Hierarchical Regression Analyses: Mediation of the Effect of Proactive Personality on Career Future by Intent to Remain with the Organization

<table>
<thead>
<tr>
<th>Regression 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>ß</th>
<th>$\Delta R^2$</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Personality</td>
<td>.39***</td>
<td>.16***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regression 2&lt;sup&gt;b&lt;/sup&gt;</th>
<th>ß</th>
<th>$\Delta R^2$</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>.14***</td>
<td>.14***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>.37***</td>
<td>.19***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive Personality</td>
<td>.18*</td>
<td>3.63</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Intent to remain</td>
<td>.48***</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Dependent variable is Intent to remain with the organization  
<sup>b</sup>Dependent variable is Career Future
Note. N = 120. *p<.05, ***p<.001.

**TABLE 5**

Summary of Hierarchical Regression Analyses: Mediation of the Effect of Proactive Personality on Career Future by Job Satisfaction

<table>
<thead>
<tr>
<th>Regression 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>ß</th>
<th>Δ R²</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive Personality</td>
<td>.50***</td>
<td>.25***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Regression 2<sup>b</sup> | | | | |
|--------------------------| | | | |
| Step 1                   | | | | |
| Proactive Personality    | .37*** | | | |

| Step 2                   | | | | |
| Proactive Personality    | .22*** | | | |

| Job Satisfaction         | .10 | 4.47 | .00 |

Note. N = 120. ***p<.001.

---

<sup>a</sup>Dependent variable is Job Satisfaction
<sup>b</sup>Dependent variable is Career Future

*Note. N = 120.*  ****p<.001.
As shown in Table 3, the regression coefficient for managerial communication was significant in contributing to career future when proactive personality was controlled indicating the mediating role of managerial communication ($\beta = .63, p = .001; R^2\Delta = .28, p = .00$). In step 2 proactive personality was insignificance which suggested that managerial communication completely mediated the relationship between proactive personality and career future. The Sobel test (1992) revealed significant evidence of mediation by managerial communication, $z = 5.24, p = .00$.

Similarly we tested hypotheses 3 and 6 and found support for the mediating role of intent to remain with the organization ($\beta = .48, p = .001; R^2\Delta = .19, p = .00$) and job satisfaction ($\beta = .55, p = .001; R^2\Delta = .22, p = .00$). In case of intent to remain the statistical significance of proactive personality reduced in step 2, confirming partial mediation. However, in case of job satisfaction, proactive personality was insignificant in step 2 indicating complete mediation. Sobel test was calculated and provided further evidence for the meditational role of intent to remain ($z = 3.63, p = .04$); and job satisfaction ($z = 4.47, p = .000$).

Hypothesis 5 which proposed the mediatonal role of job performance was not significant when proactive personality was introduced in the second step.

The regression coefficient for the interaction term between proactive personality/managerial communication and proactive personality/intent to remain was insignificant and hence hypothesis 2 and 4 respectively were not supported.

**DISCUSSION**

The present study aimed at empirically testing a conceptual model and delineating the process/mechanism through which proactive personality affects career future through managerial communication, job performance, job satisfaction and intent to remain with the organization. Managerial communication and intent to remain had a robust relationship with career future and explained 45% of the variance. Intent to remain with the organization partially mediated while managerial communication and job satisfaction completely mediated the relationship between proactive personality/career future. This study adds to both the fields of proactive personality and career and the results are useful for both academicians as well as practitioners.

**Practical implications**

The above findings have several practical implications especially from an applied perspective, this type of research is important as it gives more insight on how organizations can recognize and leverage from those exhibiting proactive personality. There is hardly any doubt in the fact that proactive people are an asset to the company, however it is up to the company to make sure that they do not lose such an asset. It is important for them to be convinced that their career has a future in the company. There is a possibility that in the event of job insecurity and less scope for success proactive personality employees might seek brighter pastures. Thus it is of vital importance that employers should make sure that their proactive employees are assured that they will progress in their career within the organization. Our results have shown that proactive individuals’ intent to remain with the organization and managerial communication affects their belief in their career growth. It is therefore vital that organizations provided employees with as much information about the change and encourage a two way communication. Additionally, they should be provided with performance feedback and discuss their job satisfaction to assure they are satisfied with their job and their work performance.
Limitations of the study

Data for this study was collected anonymously. Although limiting any inference of causality among the study variables, protecting respondents’ anonymity provided benefits by potentially reducing the method bias (see P. M. Podsakoff, MacKenzie, Lee, & N. P. Podsakoff, 2003). This is a particularly important aspect in the present study as it related to organizational change which is often characterized by high levels of distrust and uncertainty and which may lead to biased responses if participants believe their identity could be revealed to management. This, in turn, may result in a less of internal validity if respondents are hesitant to provide honest responses to the survey questions for fear of repercussion (Green & Feild, 1976).

Data was collected using the snow-ball method and hence it was difficult to avoid impending confounding factors, such as type of industry, resources, and markets (Pritchard et al, 1988; Mukherjee, Lapre’, & Wassenhove, 1998).

Another limitation was related to common method variance as the data was collected in one sitting—the survey included both the criterion and the predictor variables. P. M. Podsakoff, MacKenzie, Lee, and N. P. Podsakoff (2003) mentioned that one of the most common variables assumed to cause common method variance is the tendency for participants to respond in a socially desirable manner. They argue that respondents may have less evaluation apprehension and therefore are less likely to edit their responses to be more socially desirable when anonymity is assured. In the present study the responses were completely anonymous thereby protecting the respondent’s identity. Although this does not completely eradicate the problem of common method bias but it does alleviate it. This is a particularly important aspect as different organizations have varied levels of distrust and uncertainty (Buono & Bowditch, 1989), which may lead to biased responses if participants believe their identity, could be revealed to management. This, in turn, may result in a less of internal validity if respondents are hesitant to provide honest responses to the survey questions for fear of repercussion (Green & Feild, 1976).

FUTURE RESEARCH

Following are some ideas for future research. Firstly careers may be subjective—the individual’s internal apprehension and evaluation of his or her career, across any dimensions that are important to that individual; or objective—individual’s external perspective that describe more or less tangible indicators of the individual’s career situation (Van Maanen, 1977, p. 9). In the present study we did not take into consideration this aspect of career, hence future research could replicate this study by measuring career future both subjectively and objectively.

A natural extension of this study is to replicate it in the U.S. and conduct a cross-cultural study. The study could also be replicated by comparing data across cultures such as Japan. Japanese employees exhibit higher work centrality, and give greater importance to job security and stability than do employees in the U.S.(England & Misumi 1986; Lundberg & Peterson 1994).

Further it would be interesting to observe how the results of this study vary across demographic variables especially age. Although in the present study we collected data for age we hardly had any variation in the age as a major portion of the respondents were either above 40 or 50 years. Age plays an important role especially in today’s dynamic and ever-changing environment with older workers being more resistant to changes in job. They tend to worry that they may have to start afresh especially if there is no significant value for their job experience of past working skills (Campbell & Cellini 1981; Hansson et al. 1997). Another important
demographic variable is workforce diversity as careers have changed with increased workforce diversity (England & Farkas 1986; England, Reid, & Kilbourne 1996; Johnston & Packer 1987).

Crant (2000) aptly states the importance of proactive personality which can be rightly applied to an organization undergoing change—as change relates to dynamism and uncertainty: “As work becomes more dynamic and decentralized, proactive behavior and initiative become even more critical determinants of organizational success” (p. 435). This study provides an initial attempt to delineate the mechanism by which proactive personality affects career through certain job-related outcomes in the backdrop of a change setting. The “bottom line” is to send a message to organizations to value one of their most important assets—its proactive employees especially in a competitive and ever changing world where employees undoubtedly form the core competency of the company.

REFERENCES


ANTECEDENTS OF PRE-TRAINING MOTIVATION: A VIEW FROM SITUATIONAL PERSPECTIVE

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Kyungmoon Kim, Louisiana Tech University, kmk023@latech.edu

ABSTRACT

As an attempt to apply expectancy theory, from the situational perspective, to understand the pre-training motivation of organizational members, this conceptual paper proposes a model to examine the effects of environmental and organizational characteristics as well as the effects of organizational strategic choice on pre-training motivation. Positive relationships between the stable-dynamic dimension of the environment, the organic-mechanic dimensions of the organizational structure are proposed. Pre-training motivation is also predicted to be higher in organizations following a differentiation strategy than that in organizations following a low-cost strategy. The moderating role of organizational strategic choice in the proposed relationships is also examined.

INTRODUCTION

Training motivation can be conceptualized as the direction, effort, intensity, and persistence that trainees apply to learning-oriented activities before, during, and after training (Kanfer 1991, Tannenbaum & Yukl 1992). Several studies have found (and supported) that trainees’ motivation to learn and attend training has an effect on their skill acquisition, retention, and willingness to apply the newly acquired KSAs on the job (e.g. Martocchio & Webster 1992, Mathieu et al., 1992). Whereas the literature is, in general, clear about the influence of training motivation on learning outcomes, an adequate model that helps understand the antecedents of training motivation has not emerged yet. Recent research has shown big effort placed on understanding effects of individual characteristics but little effort on effects of situational characteristics, especially on the environmental and organizational characteristics.

Consistent with Salas and Cannon (2003), there is little effort in recent research to understand the effects that situational factors (i.e. environmental and organizational characteristics) have on training motivation. The only considerable effort is made by Colquitt, LePine, and Noe (2000) who have shed light on the underlying processes and variables involved in understanding training motivation throughout the training process. Their integrative narrative and meta-analytic review suggest that training motivation is multifaceted and influenced by a set of individual (e.g. cognitive ability, self-efficacy, anxiety, age, conscientiousness) and situational (e.g. climate) characteristics. This effort provides the beginnings of an integrative theory of training motivation, a much needed synthesis and organization. In term of situational characteristics, Colquitt and his colleagues found that supervisor support, peer support and positive climate were moderately related to “motivation to learn”, used as the same meaning of “training motivation” in their study. This finding accounted for a very small portion of the study analysis and considered “not examined with enough frequency to be included in the path analysis” by the authors.
As conceptualized above, training motivation needs to be examined before, during and after the training program. As a consequence, its antecedents across three stages will be different and should be examined differently. However, research on situational effects on training motivation also focuses only on this relationship during and after training. For example, Tracey, Tannenbaum, and Kavanagh (1995) recently examined an organization's climate for transfer, which refers to trainees' perceptions about characteristics of the work environment that influence the use of training content on the job. The main features of a positive climate may include adequate resources, cues that serve to remind trainees of what they have learned, opportunities to use skills, frequent feedback, and favorable consequences for using training content. Tracey et al. (1995) found that such a climate predicted the extent to which employees engaged in trained behaviors on the job. Similarly, Rouiller and Goldstein (1993) found that a positive climate was associated with transfer of managerial skills in the fast-food industry.

The final gap in training motivation research is that the absence of the external environment analysis. A few researchers have examined some internal environment factors such as the perceived presence of manager support or peer support for participation in learning activities (e.g., Birdi, Allan, & Warr, 1997; Facteau et al., 1995). Facteau et al. (1995) argued that both managers and peers can help trainees, particularly in transferring learned skills on the job (see also Baldwin & Ford, 1988). Their study of 967 managers in departments within state government agencies showed a positive link between peer support and transfer and a positive link between manager support and motivation to learn. Birdi et al. (1997) linked manager support (though not peer support) to increased on- and off-job learning, increased development, and increased career planning. Finally, Clark et al. (1993) provided results that suggest that supportive managers can emphasize the utility of training to the job, thus impacting trainee motivation.

Generally, the gaps in training motivation research can be summarized in threefold. First, there is a lack of efforts to understand the effect of situational characteristics compared with those placed on individual characteristics. Second, among the rare research about situational effects on training motivation, there are none discussing pre-training context motivation. Finally, situational researches just focused on internally environmental effects on training motivation.

The main purpose of this paper is to examine and to make propositions about the effects of environmental characteristics (i.e. perceived of environment uncertainty), organizational characteristics (i.e. organic versus mechanic) and organizational strategic choices (differentiation versus low-cost) on pre-training motivation of organizational individual members. It is important to note that the paper only focuses on the pre-training motivation which is defined as the general feeling of training need. This need is usually stated by the organizational members through the statement “I/we need to be trained to work better”. The training motivation during the actual training program and the training motivation to transfer the training content to the job is not in the scope of this paper.

ENVIRONMENTAL AND ORGANIZATIONAL INFLUENCES ON PRE-TRAINING MOTIVATION

According to Blanchard (2007), the feeling of training need comes from a triggering event that the organizational members does not have adequate knowledge, skill and ability (KSAs) to meet the job performance expectation. Assuming that an individual can benefit from
gaining adequate KSAs to perform the job and thus, benefit the organization, it is predicted that that the individual will seek for devices to enhance their KSAs. Training, in practice, is perceived by organizational members as the most useful way for this purpose (Blanchard, 2007).

The assumption above is consistent with the expectancy theory (Vroom, 1964). On the basis of this theory, researchers have suggested that when an employee has strong preference for the outcome contingent on performance improvement (Valence), he will seek training to fill in the gap of KSAs deficiencies (Instrumentality) with a strong belief that improving KSAs will lead to improving performance (Expectancy). For example, Mathieu et al. (1992) found that motivation was a function of perceptions that increased job performance (facilitated by training) led to feelings of accomplishment, higher pay, and greater potential for promotion. Colquitt and Simmering (1998) found that trainees who valued outcomes linked to learning showed increased motivation levels. Departing from this point, I argue that given the organizational member’s belief that training can be beneficial, any factor regardless its departure should be consider as having effects on pre-training motivation if that factor could make the organizational members think that they are lacking/or will lack of adequate KSAs to meet the job performance.

Perceived Environment Uncertainty and Pre-training motivation

For the purposes of this paper, perceived environment uncertainty will be defined as an individual’s perceived inability to predict something accurately (Milliken, 1987). An individual experiences uncertainty because he/she perceives himself/herself to be lacking sufficient information to predict accurately or because he/she feels unable to discriminate between relevant data and irrelevant data. It is clear that perceived environment uncertainty will be high in the environment which is characterized as highly uncertain. Duncan (1972), synthesizing from previous studies, identified two environmental dimensions: the simple-complex and the static-dynamic dimensions. The simple part of the simple-complex dimension deals with the degree to which the factors in the decision unit's environment are few in number and are similar to one another in that they are located in a few components. The complex phase indicates that the factors in the decision unit’s environment are large in number. The static-dynamic dimension indicates the degree to which the factors of the decision unit's internal and external environment remain basically the same over time or are in a continual process of change. The dynamic-static dimension was proposed to have more significant effects on perceived environment uncertainty than did the simple-complex dimension. Duncan (1972) also identified the following main characteristics of an uncertainty environment: (1) an inability to assign probabilities as to the likelihood of future events, (2) a lack of information about cause-effect relationships and/or (3) an inability to predict accurately what the outcomes of a decision might be.

Milliken (1987) developed three types of perceived uncertainty about the environment. The “state uncertainty is experienced by the administrator when they perceive the organizational environment, or a particular component of that environment, to be unpredictable. “Effect uncertainty” is defined as an inability to predict what the nature of the impact of a future state of the environment or environmental change will be on the organization. The third one, “Response uncertainty” is defined as a lack of knowledge of response options and/or an inability to predict the likely consequences of a response choice (Duncan, 1972). In sum, the characteristics of an uncertainty environment identified by both Milliken (1987) and Duncan (1972) contribute to the increment of organizational members’ perceived environment uncertainty. Also, when the organizational members experience the high perceived environment uncertainty, that is the point
they will face some performance deficiency – or at least feel that they will – because the inability of predict future (Duncan, 1972) or lack of knowledge of response options (Milliken, 1987). Thus, they will have higher feeling of training need than when the environment is highly certain.

Environmental uncertainty can be defined broadly as the predictability and change expected in the environment (Duncan 1972; Milliken 1978) and also can be defined more narrowly, in terms of information availability (Yasai-Ardekani 1986). If information about the firm's task environment (customers, technology, government regulation, and suppliers) is readily available, managers can develop predictable expectations about the environment and design systems to exploit those expectations. When information is scarce, however, managers have difficulty planning and setting goals related to productivity and efficiency. The development of systems and technologies to bring the environment under control becomes problematic, undermining the rational goal value. A paucity of information may simultaneously shift the organization toward a dependency on key personnel and their individual judgment and experience. Such a situation would likely lead to a greater emphasis on the human relations value. Buenger et al (1996), in an empirical study of United States Air Force, found a significant positive relationship between information scarcity from the external environment and an emphasis on human relation value. According to Qinn & Rohrbaugh (1983), an organization with focus on human relation value will emphasize flexibility, stress cohesion, morale and human resources development, which in turn, create a favor environment for training activities.

Consider the stable-dynamic dimension of the environmental uncertainty, Buenger et al (1996) asserted that managers must also contend with environmental turbulence. While unpredictable and rapid change in the external environment likely disrupts planning processes and make gains in productivity problematic, the need for those processes intensifies (Kukalis 1991). Faced with uncertainty, managers must spend more time and resources on scanning and forecasting than on understanding and predicting their environment (Milliken, 1987). Additionally, Cameron (1986) reports that environmental turbulence is a major negative influence on morale in organizations. The reason may be that it distracts managers from the human relations values. The result is an increased emphasis on the rational goal value. Buenger et al (1996) proposed two opposite relationships: (1) a positive relationship between an emphasis on human relation value and complex training demand of an organization and (2) a negative relationship between an emphasis on rational goal value emphasizing control, planning and productivity and complex training demand of an organization (Qinn & Rohrbaugh, 1983). Surprisingly, their analysis found that both relationships were significantly positive. This result showed that, as a reaction to environment uncertainty, either an emphasis on human relation value or on rational goal value will lead to high complex training demand which can be considered to have interactional relationship with pre-training motivation of the organizational members.

In sum, the environment uncertainty has both direct effect on organizational members’ pre-training motivation by decreasing their KSAs or indirect effects on pre-training motivation through the organization emphasized values systems. That allows me to propose the following proposition.

Proposition 1: Given the organizational member’s belief that training can be beneficial, the organizational members’ perceived environment uncertainty is positively associated with organizational members’ pre-training motivation. Particularly, the members of
organization in highly uncertain environment will have higher pre-training motivation than that of the members of the organization in low uncertain environment.

The Organizational structure and Pre-training motivation

Organizational structure, defined as “the recurrent set of relationships between organization members” (Donaldson, 1996, p. 57), is one of the most ubiquitous aspects of organizations. Donaldson noted that structure includes—but is not limited to—power and reporting relationships such as those identified in organization charts, behaviors required of organization members by organizational rules, and patterns of decision making (e.g., decentralization) and communication among organization members. Further, it encompasses both formal and informal aspects of relationships between members. The most prevalent distinction for describing fundamental differences in organizational structure is that of mechanistic and organic structural forms. It is important to note that these two structural forms represent ends of a continuum, not a dichotomy. No organization is perfectly organic or mechanistic; most display some characteristics of both, and intermediate stages exist between the two archetypes (Ambrose & Schminke, 2003).

Mechanistic structure is characterized as rigid, tight, and traditional bureaucracy. In mechanistic settings, power is centralized, communications follow rigid hierarchical channels, managerial styles and job descriptions are uniform, and formal rules and regulations predominate decision making (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). Organizational members will be likely dependent on their top managers in decision making when facing a performance deficiency rather than looking for an innovative solution or think about develop their own KSAs to meet the performance expectation. Furthermore, because in mechanistic structure formal rules and regulations predominate decision making, it is likely that the mechanistic organization will emphasize the goal rational value system which pay less effort on developing the internal human resources than do the other system such as human relation value or open system (Milliken, 1987).

By contrast, organic organizations are characterized by flexible, loose, decentralized structures. Formal lines of authority are less clear, power is decentralized, communication channels are open and more flexible, and formal rules and regulations take a back seat to adaptability in helping employees accomplish goals (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). It is clear that this kind of structure supports the human relation value and encourages the self development of organizational members as well. Employees have more authority to make decision and thus, more self-efficacy to solve the performance deficiency by self-development rather then relying on the top managers. Colquitt et al (2000) found a significantly positive relationship between pre-training self-efficacy and pre-training motivation. Based on those premises, I argue that the members of organic organizations will have higher pre-training motivation than that of the members of the mechanistic organizations. Thus, the following proposition is offered:

Proposition 2: Given the organizational member’s belief that training can be beneficial, the dimension organic-mechanistic of organizational structure will be associated with motivation of the organizational members. Particularly, the pre-training motivation of the organizational members in organic organization will be high and will be low in mechanistic organization.
The mediating role of organizational structure in the relationship between perceived environment uncertainty and pre-training motivation

According to Holmbeck (1997), a mediational model is a causal model, whereby it is hypothesized that A "causes" B and that B then "causes" C. Four conditions must be met for B to be a mediator: (1) A (predictor) is significantly associated with C, (2) A (predictor) is significantly associated with B, (3) B is significantly associated with C (after controlling for A) and (4) The impact of A on C is significantly less after controlling for B (Holmbeck, 1997).

To find support for the mediating role of organizational structure, I first examine the effects of perceived environment uncertainty on that construct. Contingency theory suggest that perceived environment uncertainty affects organizational structure, that administrators design organizational structures such that the organization will be able to more effectively respond to environmental demands, and that they do this in accord with their perceptions of the environment. In general, it is argued that the more uncertainty that is perceived, the more will be the looseness or flexibility or "organicness" of the organizational structure, that is, that a positive relationship exists between these variables. For example, on the basis of a number of field studies Osborn and Hunt (1974) concluded that either perceived or objective environmental uncertainty is a determinant of organizational structure. In particular they stated (1974: 232):

"The work of Burns and Stalker (1961), Chandler (1962), Emery and Trist (1965), Lawrence and Lorsch (1967), and Negandhi and Reiman (1973), among others, has indicated that as [the task environment] becomes more dynamic, the organization must become not only more receptive to change, but alter its internal structure and operations to maintain and/or establish a high survival potential."

If various structures are differentially effective in processing information to reduce decision-making uncertainty, then the information processing capabilities of structure would need to be consistent with the uncertainty perceived in the environment (Koberg, 1987). An organic structure, with its low degree of formality and high degree of information sharing and decentralization, enhances an organization's flexibility and ability to adapt to continual environmental and uncertainty (Mintzberg, 1979). Thus, the conceptual studies support the positive relationship between perceived environment uncertainty and organic organizational structure.

From the empirical perspective, the field studies of Duncan (1971), using data from 22 decision groups, and Khandwalla (1972), using data from 29 manufacturing firms, both found that increased perceived uncertainty was correlated with less mechanistic structures for effective organizations, thus apparently supporting the perceived environment uncertainty influences structure argument. Leifer and Huber (1977) in a field study comprising 12 work units (182 people) working in a health and welfare organization found supports for the positive relationship between perceived environment uncertainty and organic organizational structure.

I also argue that when the environment becomes more uncertain, if the organization structure does not change accordingly and gradually from low to high organic, the effects of perceived of environment uncertainty on pre-training motivation will be less than the case that the organizational structure becomes more organic. It is clear that when the perceived environment uncertainty increases, first the organizational members pre-training motivation will increase accordingly. However, if the internal environment (i.e. organizational structure) does not favor the learning activities, the pre-training motivation will decrease over time. Departing from this point, plus the positive relationship between perceived environment uncertainty and
Proposition 3: The organic – mechanic dimension of the organizational structure will mediate the relationship between perceived environment uncertainty and pre-training motivation of the organizational members.

The Organizational Strategic Choice and Pre-training motivation

This part is to examine the effects of organizational strategic choice on the organizational members’ pre-training motivation. There are two dimensions of the organizational strategic choice discussed in theory: build versus harvest and differentiation versus low cost. The mission of the "build" strategy is to gain market share often at the expense of short-term profitability and cash flow. The mission of the "harvest" strategy is to maximize short-term profits and cash flow, often sacrificing market share (Glueck & Jauch, 1984; Govindarajan, 1986; Hofer & Schendel, 1978). The build/harvest strategic missions do not describe how the firms compete, but only indicate the intended outcomes (Govindarajan, 1986). Thus, this dimension is not appropriate to be considered for its effects on the pre-training motivation of the organizational members which is depending on how the organization selects a long-term strategy to achieve the strategic goals.

Porter (1985) proposed two generic competitive strategies that describe a means for attaining the desired outcomes: low-cost and differentiation. This dimension is more appropriate for a discussion about its effects on pre-training motivation because it emphasize on the means, rather than the expected outcomes. For this reason, only the low-cost and differentiation strategies are considered in this paper.

A strategy of differentiation is defined as an attempt to offer a product that is perceived industry-wide as being unique (Porter, 1980). This strategy requires an external orientation and a creative flair in order to deliver a unique product to the customer. Since the differentiating firm does not make standard products, it needs to know both what types of products customers want and what customers think about the products it makes. There are multiple approaches to differentiation; it can be based on the product itself (i.e., technology, design, quality), marketing approach, delivery system, or customer service. A successful differentiator will seek approaches that lead to a price premium greater than the cost of differentiating. Considering that there are numerous ways of achieving and maintaining uniqueness in the marketplace, a differentiator will require a relatively large information-processing capacity to deal with the many available options. The logic of the differentiation strategy requires that a firm choose attributes on which to differentiate itself that are different from its rivals. The options available to a differentiator with respect to what unique product features to offer normally would be greater than those available in the case of a low-cost strategy. Thus, information-processing requirements will be huge in the case of organization following a differentiation strategy. The consequence is that, the member of the organization following the differentiation strategy will need great competency in all information related task such as collecting and processing.

Achieving differentiation sometimes may preclude gaining a high market share. It often requires a perception of exclusivity which is incompatible with high market share (Porter, 1980). This exclusivity, in turn, may require unique product design, distinctive styling, and sophisticated promotional appeal as well as manufacturing craftsmanship, multipurpose
equipment, high quality materials, and extensive product research and development. The lower volume of production, combined with an organizational emphasis on special product characteristics and flexibility/adaptiveness toward the marketplace, suggests that differentiation strategy will lead the organization to an emphasis on human relational value system, which in turn creates a favorable environment for a complex training demand to develop (Buenger et al., 1996).

In contrast, a strategy of low cost signifies an attempt to sell an essentially undifferentiated product at lower-than-average market price (Porter, 1985). Low-cost producers typically sell a standard, or no-frills, product and place considerable emphasis on reaping scale or absolute-cost advantages from all sources. Low-cost strategy implies tight control systems, overhead minimization, pursuit of scale economies, and dedication to the learning curve; these could be counterproductive for a firm attempting to differentiate itself through a constant stream of creative new products (Porter, 1985). For a low-cost strategy to be successful, managers must direct their attention to the internal aspects of their organization, primarily to the production and engineering functions.

Achieving a low-cost position often requires a high, relative, market share or other advantages, such as favorable access to raw materials. It may require designing standard products for ease in manufacturing, maintaining a wide line of related products to spread costs, and servicing all major customer groups in order to build volume (Porter, 1980). Large production volume justifies investing in modern, efficient equipment using conveyerized assembly lines with modularized components for easy expansion of capacity. Equipment is usually of a highly specialized type (although this can be overcome with more expensive flexible manufacturing systems) and the skills required to operate it are generally low. Workers can be relatively unskilled and the discretion of people will be limited. Hence, in terms of competitive strategy, a strategy of differentiation is likely to make the intra-organization’s technology more akin to a job shop, small volume, batch type of operation. A low-cost strategy is more likely to require a greater reliance on standardization, routinization, and mass production. Thus, it is clear that organizations following a low-cost strategy do not create an environment that favors the learning activities as well as the pre-training motivation of the organizational members. Generally, differentiation and low-cost strategies are distinct and have different effects on pre-training motivation of the organizational members as proposed in the following proposition.

Proposition 4: The pre-training motivation of organizational members in the organization following the differentiation strategy will be higher than that of organizational members in the organization following the low-cost strategy.

The moderating role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation

The characteristic of uncertainty environment which is mostly related to a differentiation strategy is the information scarcity. Given that the organization does not change from differentiation to low-cost strategy, the increase of perceived environment uncertainty place a greater demand on the organizational members’ competency to collect, to filter and to process the required information to maintain the competitive advantage. Eisenhardt (1989) found that successful decision-makers in high-velocity environments use more information, consider more alternatives, and seek a greater amount of advice. Instead of departing from the analytical requirements of comprehensive decision-making, they accelerate their cognitive processes. The
quick decisions resulting from comprehensive decision processes lead to better performance (Goll & Rasheed, 1997). Further, differentiation firms rely most on the application of unique technology to win the target market; in the high uncertainty environment, that the technology changes rapidly forces the firm keep continue training their employees to acquire adequate KSAs to run the new technology. In contrast, when the environment becomes highly unfavorable (i.e. high uncertainty), the low-cost firms may try to reduce the cost by cutting-off production or decreasing market size. Those reactions will lead to the decrease of the pre-training motivation of the employees.

According to the expectancy theory (Vroom, 1964), because improving the organizational members’ competency in information related task will help improve the differentiation organization’s performance, both the organization and its members will favor the employee development activities. In contrast, the low-cost organization will not favor training their employees in uncertainty environment because of the cost increasing; that will decrease the pre-training motivation of their employees. It is predicted that, when the environment is highly uncertain, the pre-training motivation is expected to be higher in differentiation than that in the low-cost organizations. Thus, the strategic choice of the organization will significantly affect the relationship between the perceived environment uncertainty and pre-training motivation of the organizational members. That allows me to propose the following proposition about the role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation.

Proposition 5: Organizational Strategic Choice will moderate the relationship between perceived environment uncertainty and pre-training motivation of the organizational members. Particularly, the relationship between perceived environment uncertainty and pre-training motivation of the organizational members will be stronger in differentiation organizations than that in the low-cost organizations.

The moderating role of strategic choice in the relationships between organizational structure and pre-training motivation

There is theoretical foundation for the argument that the differentiation strategy favors the highly organic organizational (low mechanic) structure and the low-cost strategy favors the low organic structure (high mechanic). The differentiation strategy relies on the less formalized structure and gives more autonomy to the employees whereas the low-cost emphasize the standardization of the production process and limit the discretion of people (Govindarajan, 1986). Furthermore, as argued above, the differentiation firms tend to emphasize the development of their human resources while the low-cost firms tend to cut any activities that may increase their production costs. It is clear that given a constant level of an organization in the dimension organic-mechanic structure, the organizational strategic choice significantly affect the relationship between this dimension and pre-training motivation of organizational members. Departing from this point, plus the high pre-training motivation in differentiation firms and low pre-training motivation in low-cost firms (Proposition 4), I propose the following proposition about the moderating role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation.

Proposition 6: Organizational Strategic Choice will moderate the relationship between the dimension organic-mechanic of organizational structure and pre-training motivation of the organizational members. Particularly, the relationship between this dimension and
pre-training motivation of the organizational members will be stronger in differentiation organizations than that in the low-cost organizations.
The relation of propositions in this paper is depicted in Figure 1.

![Diagram](image)

Figure 1: The model of antecedent of pre-training motivation from situational factors.

DISCUSSION

The primary relevance of this paper is in its extension of the expectancy theory linking pre-training motivation to situational factors from the environmental to the organizational context. Theoretical arguments in support of the interactive effects of the perceived environment uncertainty, organizational structure and organizational strategic choice on the pre-training motivation of organizational members have been presented. The proposition developed here should serve as a foundation for new empirical research.

Historically, as part of the development of the theory of pre-training motivation, considerable research efforts were devoted to identifying the factors on which pre-training motivation may be dependent. Several factors related to individual characteristics such as personality (Colquitt & Simmering, 1998), locus of control (Noe, 1986), self-efficacy (Martocchio & Webber, 1992; Quinoes, 1995) and aging (Stern & Doverspike, 1989) so far have been identified. Colquitt et al. (2000) develop an integrative model which proposed training motivation as a multifaceted variable and called for a comprehensive approach which recognizes both individual and situational characteristics effects on this variable. This paper inherits and extends the importance of Colquitt et al.’s (2000) approach by first pointing out that perceived environment uncertainty is a preeminent source of variation for the pre-training motivation of the organizational members and further suggesting that the training complex demand are affected by the organization’s chosen competitive strategy and organizational structure as well as by the interaction among those factors. Future theoretical developments in the area of training motivation might benefit from focusing explicitly on the organizational variables as the source of variation rather than only examining individual variables such as age, personality, and self-
efficacy. Thus, a more comprehensive approach of training motivation will help understand training motivation from a situational perspective.

The propositions in this paper have practical importance as well. The general contribution is that managers need to recognize that training motivation is a multi-faceted variable and situational factors has important effects on training motivation as do the individual factors. The more particular application is about the training decision and its effectiveness. Training is costly but there has been a lack of comprehensive typology to evaluate the training outcomes (Salas & Cannon 2003). The training cost $59 billion was spent by the US employer on formal training in 1996. This number increased to $129.6 billion in 2006 and $134.39 billion in 2007 (ASTD Industry Report 1996, 2006, and 2007. The training cost in US companies is huge but not much when compared with other countries. Noe (1998) pointed out that US companies only spend about one-third as much as Japanese companies do on training. This information indicates that training is really considered important to organization through the world and companies are willing to invest a large amount of money in training activities. They key question here is: Are there some cases that the managers make wrong training decision (i.e. implement a training program while there is not a real training need)? This paper partially helps address this question by reminding the managers that situational factors may lead to high pre-training motivation. Managers can benefit from the proposed model to understand the organizational pre-training motivation in their actual contexts. Practices of either low or high pre-training motivation affect the training decision and training performance. It is clear that low pre-training motivation may lead to poor training performance but the pressure of high training demand also force the managers to make the wrong decisions as well. Members of organizations with organic structure and differentiation strategy will feel that they always need training to perform better whereas they may possess enough job competencies and training may not be the best solution or in other words, high pre-training motivation may become a false indicator of training need.

Limitation and Future Research Recommendation

This paper has some limitations. First, because this is the first paper attempting to examine the relationship between environmental and organizational factors on pre-training motivation, the theoretical background supporting the arguments is limited. Second, the distinction between the conceptualizations of perceived environment uncertainty and environment uncertainty is not cleared. Both the two terms are mutually used as one construct here but in fact, they are two different concepts. Environment uncertainty is the characteristics of the external environment in a period. According to Duncan (1972), uncertainty and the degree of the complexity and dynamics of the environment should not be considered as constant features in an organization. Rather, they are dependent on the perceptions of organization members and thus can vary in their incidence to the extent that individuals differ in their perceptions. Some individuals may have a very high tolerance for ambiguity and uncertainty so they may perceive situations as less uncertain than others with lower tolerances. As a consequence, pre-training motivation might be different from one individual to another; that challenge the validity of the model proposed in this paper. Finally, whether organizational strategic choice is a dichotomy or continuous variables is still a debate; its nature, when finally defined and widely accepted, may affect its proposed moderating role.

This paper also has some implications for future research. First, there is a need for empirical study to define the perceived environment uncertainty construct as well as to test for
the construct’s reliability and validity. Second, there are others situational variables that may affect the pre-training motivation but are not included in the model. Cultural effects and organizational compensation policy are some examples. More empirical and conceptual studies should be developed to provide a more completed understanding of pre-pre-training motivation. Finally, how perception of organizational members about organizational characteristics differs from the practices and whether this difference affects the pre-training motivation of the organizational members is a potential area for future research.

REFERENCES


SIMULATIONS FOR STRATEGY COURSES;  
COMPARING US AND EU COURSES

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ABSTRACT

Simulations are an important part of capstone strategy course - they facilitate transfer of training by providing “learning-by-doing” opportunities to the students. They also allow instructors to provide authentic activities situated amidst relevant context, enable learners to grasp not just ‘how’ an activity must be done, but the ‘why,’ the ‘what, and the ‘with whom.’ Simulations have become an accepted part of many strategy classes both at the undergraduate and graduate levels. One area that has not been fully explored is how well the typical simulation used in US courses would translate to a strategy course taught in the EU. This paper compares an executive MBA strategy course taught in the US with an almost identical executive MBA course taught in the EU (both over a three year period) to see how effective the simulation was in both settings.

INTRODUCTION

Simulations are an important part of capstone strategy course. Edgar Dale (1969) illustrated this with his research when he developed the “Cone of Learning”. This concept states that after two weeks we remember only 10% of what we read, but we remember 90% of what we do! Simulation-based training puts learning objectives into the context of a scenario which allow the learner to experience training as it relates to a life-like situation.

One of the key reasons that simulation have taken off is the need for people to learn skills faster and more completely than in the past. Many high-end business simulations resemble computer games. Computer games and simulations have much in common. A difference between computer games and simulations is the main objective: entertainment versus skill building.

Capsim Simulation

One of the leading business simulations is from the firm, Capsim (2011). The Capsim business simulation engages participants in a dynamic competition to turn struggling companies into successful, profitable businesses. Classes are divided into teams that compete against each other by making strategy, finance, production, and marketing decisions that interact to grow their business. Instructors focus on using the simulation experience to reach defined learning goals.

With each round of decisions (each representing a full year for the company), participants build their business acumen and decision-making ability as they interpret data, shape strategies, and discuss the results. A wide variety of Capsim results, data, and services support the creation of a dynamic, highly interactive learning experience.

Delivered online, in the classroom, or a combination of both, and delivered in condensed or expanded time frames, Capsim simulations have the flexibility to adapt to many academic or
corporate curriculum. Capsim simulations have been used extensively at more than 500 business schools and leading corporations in the US. They are also beginning to be used worldwide. However, the simulation is based on the US business model. There have been some questions on how well this US business model/simulation would work in an EU or Asian business school.

**Business Education in the US**

The US has many Master’s and MBA programs. A capstone strategy class is usually one of the final courses taken and integrates all the material from previous classes such as marketing, accounting, and finance. Students draw on their awareness of various environmental influences (social and political) to solve business problems. Management alternatives are examined with an ethical perspective relating policy trends to the strategic planning mode.

The purpose of a capstone course is to integrate the learning achieved in individual business courses taken to earn a business degree. The knowledge acquired in finance, accounting, operations, MIS, marketing, and organizational behavior classes are utilized to study the strategic management of the firm as well as the responsibilities of the general manager. This is often accomplished with the extensive use of case studies. This model has proven effective and has been copied by business schools worldwide.

Another approach to integrate the learning achieved in individual business courses taken to earn a business degree is the use of simulations. Students participate in a simulation that requires taking into account multiple decision-making factors while balancing all sectors of the firm’s environment. According to Dale (1969), an active learning method can provide even better results. Therefore, simulations have become a standard part of many US undergraduate and graduate capstone strategy courses. They are also becoming common in strategy courses in many other countries.

**Business Education in the European Union (EU)**

Over the past decade, the formation of the European Union has enabled and challenged the organization of educational systems across the EU. Several issues are paramount: increasing politics in business education, management of education costs, process and focus of business studies within the EU, and the reorganization of educational systems within the new EU member states and the changes they are experiencing in business education (Holtham, 2006).

Business education within the EU has been based on disparate systems, some more heavily coordinated by national bodies than others. Business degrees were offered in some countries at the university level, in some at institute or polytechnic level, and in others at Fachhochschule (universities of applied sciences), with the names of the degrees ranging from bachelors (UK), to Diplom (Germany), to licence (France), laurea (Italy), or licenciatura (Spain), and periods of study ranging from 3 – 5 years to receive the respective degree designation (Lambert, 2006).

The differences between the systems prompted the need for a coordinated effort, not to find a common theme that all could use, but rather to focus efforts at seeking a harmonization of
existing systems that were obviously heavily based in the historical, cultural, and economic backgrounds of each of the respective countries. In what has become known as the Bologna Process, as the process began with educational representatives of 29 European countries in 1999 in Bologna and has been further advanced in Prague in 2001, Berlin in 2003, and Bergen (Norway) in 2005, European educators have sought to bring a more commonly understood system of recognizing postsecondary academic work and assuring quality standards throughout the European Union (Institute for International Education, 2003).

A total of 45 political states are currently signatories of the European Higher Education Area, including countries such as Turkey, the Ukraine, and Serbia-Montenegro (Bologna Process, 2006). The basic framework proposed in the Bologna Process includes three degrees: bachelors, masters, and doctors. In most cases, these three degrees will take 3, 2, and 3 years respectively to complete. These degrees are closer to the current model in the US and the UK than in most of continental Europe.

The program length varies from country to country, and also between institutions within a country. However, due to the Bologna process, there is some desire to standardize the business courses offered in the various countries – at least to some degree. The capstone strategy course is one of the areas to begin this standardization. This is especially true for graduate education (Carr, 2006).

**Changes in Graduate Business Studies in the EU**

In addition to variants of the undergraduate course of study for business, the Bologna Process also considers graduate level courses at the Masters level. The MBA degree was an American invention, but an increasing number of EU schools have developed programs whose reputations rival those of the top US institutions. While US business schools still award the most MBA’s, overseas programs are growing in number and stature.

Before, the MBA was offered by only a few universities such as INSEAD in France, the London Business School, and Spain's IESE Business School. Today, MBA’s are awarded by hundreds of EU universities, from England's Oxford University to various University of Applied Sciences in Germany. In the U.K., the number of MBA graduates rose from about 7,000 in 1994 to over 10,000 in 1999, according to the U.K. Association of MBAs (Bidault, 2006).

Until 1999, German universities were prohibited from offering bachelor’s and master's degrees because these degrees didn't fit the traditional German curricula. When the German government lifted the ban, many universities began MBA programs. Moreover, collaborative MBA programs have also become the norm, and are encouraged by pan-EU initiatives such as the 2005 Bergen meeting of the EU dealing with the Bologna Process (Carr, 2006).

Although many EU business schools have international ambitions, some haven't dropped their national focus entirely. Many maintain a substantial percentage of native students and are deeply entrenched in their respective cultures and educational systems. But some EU schools are creating more US links to enhance their global reputations -- ranging from simple exchange
programs to joint degrees. INSEAD has an alliance with the University of Pennsylvania’s Wharton School. London Business School has an alliance with Columbia University (Bidault, 2006).

EU universities have also seen an increase in the demand for Executive MBA (EMBA) programs in the last ten years. Fewer Europeans in their thirties have an MBA than in the US due to the lack of MBA programs in earlier years. However, EU managers are beginning to realize that the lack of an MBA might prevent them from reaching senior positions. Therefore, EMBA’s are a growing area for EU universities (Bidault, 2006). Due to the nature of executive education, the standardization process may be somewhat easier for the Executive MBA.

**Purpose and Research Questions**

The purpose of this study was to compare the student success in the simulation part of an executive MBA strategy course taught in the US with an almost identical executive MBA course taught in the EU (both over a three year period) and to see how effective the simulation was in both settings.

Previous results (Chasteen and Damonte, 2007) have indicated that the overall student success was similar for executive MBA’s in both the US and the EU. However, a detailed look has not been made for differences in student success in the various parts of courses. The capstone strategy course is one of the courses that is similar in both the US and the EU. Both the US and the EU institutions have made extensive use of detailed case studies. However, as noted above, simulations may be a more effective method for a final capstone strategy course.

This study used an executive MBA strategy course taught in the US with an almost identical executive MBA course taught in the EU (both over a three year period). The topics covered in the course were traditional class lectures, exams, case discussions, and a business simulation. The simulation exercise was implemented with a web based simulation game for both the US and EU classes. The simulation lasted seven rounds (or seven years) and was scored by using the Balanced Scorecard (BSC). The main research question was whether the student background would have an impact on student BSC scores for the simulation when the only significant difference in the two courses was student backgrounds.

The following three research questions were addressed:

1. Is there a difference in the scoring by students who take the course in the US and those who take it in the EU?
2. Is there a difference in the perceived amount of work required between students who take the course in the US and those who take it in the EU?
3. Is there a difference in the overall satisfaction of students who take the course in the US and those who take it in the EU?
Procedures

For this study, executive MBA strategy courses at a US university and a French university were compared over a 3 year period. The course was composed of three areas: a lecture part covering the traditional topics in a strategy class, case analysis and discussion, and a simulation exercise. The course was structured to make the US class as much like the EU class as possible.

The simulation exercise used the Capsim Foundation Simulation. Capsim is the best-selling business simulation in the world. This simulation is used at over 400 universities and colleges (Anderson and Coffey, 2004) in the US. Both the US and EU classes were divided into teams to compete in a computer simulation by managing an imaginary firm that manufactured electronic sensors. The teams had to make research and development, production, marketing, and financial decisions concerning the product. The teams entered their decisions into the simulation and then analyzed the results once all the other team decisions were entered and processed. The simulation lasts for seven rounds representing seven years. A total of 112 students (58 in the US and 54 in the EU) over a 3 year period were included in this study.

The Balanced Scorecard scoring from the simulation was used to compare student success in the classes. The Balanced Scorecard allows companies to gauge their performance by assessing measures in four categories:

- Financial– includes profitability, leverage and stock price;
- Internal Business Process– ranks, among other measures, contribution margin, plant utilization and days of working capital;
- Customer– examines the company's product line, including how well it satisfies buying criteria and awareness/ accessibility levels;
- Learning and Growth– evaluates employee productivity.

The Balanced Scorecard allocates points in each of these four areas for each of the rounds and a final recap score. The team with the highest BSC is considered to be the winner of the simulation rather than just the team with the highest stock price or highest profits. Since the Balanced Scorecard allocates points in four major sections, it is considered a more representative measure of success.

Findings

The research questions were addressed based on the data gathered from the six class sections as follows:

1. The BSC ranking of both the US and EU teams. Table 1 shows the BSC ranking of the US teams and the EU teams for one year. As can be seen, the EU students scored about as well as the US students. Similar results were obtained in the other 2 years. Therefore, there seems to be no difference in BSC results based on student background.
Table 1: BSC comparison for US versus EU students

<table>
<thead>
<tr>
<th>Activity</th>
<th>US teams</th>
<th>EU teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrews</td>
<td>41 44 39 40 35 28 37 0 35 299</td>
<td>41 52 53 54 56 58 56 0 159 529</td>
</tr>
<tr>
<td>Baldwin</td>
<td>44 45 31 41 36 34 36 0 85 352</td>
<td>42 44 49 45 47 41 0 155 469</td>
</tr>
<tr>
<td>Chester</td>
<td>29 33 47 48 49 49 51 0 131 436</td>
<td>46 51 56 59 55 51 0 100 468</td>
</tr>
<tr>
<td>Digby</td>
<td>37 55 47 57 63 64 66 0 203 592</td>
<td>38 33 37 32 33 37 36 0 89 334</td>
</tr>
<tr>
<td>Erie</td>
<td>41 46 48 54 50 47 46 0 132 464</td>
<td>38 43 36 31 28 31 25 0 31 263</td>
</tr>
<tr>
<td>Ferris</td>
<td>51 48 50 60 59 62 64 0 115 511</td>
<td>51 52 52 64 70 67 64 0 154 573</td>
</tr>
</tbody>
</table>

Table 2: Self-reported work required/course satisfaction for US students

<table>
<thead>
<tr>
<th>Activity</th>
<th>% time used for activity</th>
<th>ranking of value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading the textbook</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Professor’s presentation</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Preparing cases</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Case discussions</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Preparing for exams</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Activity</td>
<td>% time used for activity</td>
<td>ranking of value</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Reading the textbook</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Professor’s presentation</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Preparing cases</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Case discussions</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Preparing for exams</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Simulation rounds</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Simulation presentation</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 3: Self-reported work required/course satisfaction for EU students

3. The questionnaire also asked the students to rank (from 1 to 7) the most satisfying part of the course. As can be seen in the two tables, both the US and EU students felt the simulation was the most useful part of the course. Students could also make additional comments in the survey concerning the course. Students in both the US and EU said the simulation was the highlight of the course and in some cases, was the highlight of the entire executive MBA program.

Implications for Educators

University and government reports show that executive education continues to grow at a rapid rate in both the US and the EU. As the demand for executive education increases in the EU, more US business faculty may face the challenge of redesigning their traditional courses for teaching in an EU setting. This study implies that most US courses can be taught “as is” in the EU with the same success rate. Therefore, the commonality of courses in the US and EU will continue to increase.

REFERENCES


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i Note that already including the possibility of unintended consequences of one’s actions means that a fully reliable probabilistic guide to decision making is not possible: “The very decisions that would require a fully reliable probabilistic guide may change the socioeconomic future in an unpredictable way, and this possibility of change prevents such a fully reliable guide from existing. […] This means that some relevant information cannot be known, not even in principle, at the time of making many important decisions.” (Dequech, 2000, p. 48)

ii The term “product” is used as a generic term for an artifact that can be anything, either a physical/manufactured good or a service, or a more abstract artifact such as project.

iii More realistically, products will try to cover a small area around a center of product characteristics, thereby capturing adjacent demand dots as well.

iv Consider in this regard the old saying attributed to Steve Jobs from Apple Computer: “A lot of times, people don’t know what they want until you show it to them.”
motivation if that factor could make the organizational members think that they are lacking/or will lack of adequate KSAs to meet the job performance.

**Perceived Environment Uncertainty and Pre-training motivation**

For the purposes of this paper, perceived environment uncertainty will be defined as an individual's perceived inability to predict something accurately (Milliken, 1987). An individual experiences uncertainty because he/she perceives himself/herself to be lacking sufficient information to predict accurately or because he/she feels unable to discriminate between relevant data and irrelevant data. It is clear that perceived environment uncertainty will be high in the environment which is characterized as highly uncertain. Duncan (1972), synthesizing from previous studies, identified two environmental dimensions: the simple-complex and the static-dynamic dimensions. The simple part of the simple-complex dimension deals with the degree to which the factors in the decision unit's environment are few in number and are similar to one another in that they are located in a few components. The complex phase indicates that the factors in the decision unit's environment are large in number. The static-dynamic dimension indicates the degree to which the factors of the decision unit's internal and external environment remain basically the same over time or are in a continual process of change. The dynamic-static dimension was proposed to have more significant effects on perceived environment uncertainty than did the simple-complex dimension. Duncan (1972) also identified the following main characteristics of an uncertainty environment: (1) an inability to assign probabilities as to the likelihood of future events, (2) a lack of information about cause-effect relationships and/or (3) an inability to predict accurately what the outcomes of a decision might be.

Milliken (1987) developed three types of perceived uncertainty about the environment. The “state uncertainty is experienced by the administrator when they perceive the organizational environment, or a particular component of that environment, to be unpredictable. “Effect uncertainty” is defined as an inability to predict what the nature of the impact of a future state of the environment or environmental change will be on the organization. The third one, “Response uncertainty” is defined as a lack of knowledge of response options and/or an inability to predict the likely consequences of a response choice (Duncan, 1972). In sum, the characteristics of an uncertainty environment identified by both Milliken (1987) and Duncan (1972) contribute to the increment of organizational members’ perceived environment uncertainty. Also, when the organizational members experience the high perceived environment uncertainty, that is the point they will face some performance deficiency – or at least feel that they will – because the inability of predict future (Duncan, 1972) or lack of knowledge of response options (Milliken, 1987). Thus, they will have higher feeling of training need than when the environment is highly certain.

Environmental uncertainty can be defined broadly as the predictability and change expected in the environment (Duncan 1972; Milliken 1978) and also can be defined more narrowly, in terms of information availability (Yasai-Ardekani 1986). If information about the firm's task environment (customers, technology, government regulation, and suppliers) is readily available, managers can develop predictable expectations about the environment and design systems to exploit those expectations. When information is scarce, however, managers have difficulty planning and setting goals related to productivity and efficiency. The development of systems and technologies to bring the environment under control becomes problematic, undermining the rational goal value. A paucity of information may simultaneously shift the organization toward a dependency on key personnel and their individual judgment and experience. Such a situation would likely lead to a greater emphasis on the human relations value. Buenger et al (1996), in an empirical study of United States Air Force, found a
significant positive relationship between information scarcity from the external environment and an emphasis on human relation value. According to Qin & Rohrbaugh (1983), an organization with focus on human relation value will emphasize flexibility, stress cohesion, morale and human resources development, which in turn, create a favor environment for training activities.

Consider the stable-dynamic dimension of the environmental uncertainty, Buenger et al (1996) asserted that managers must also contend with environmental turbulence. While unpredictable and rapid change in the external environment likely disrupts planning processes and make gains in productivity problematic, the need for those processes intensifies (Kukalis, 1991). Faced with uncertainty, managers must spend more time and resources on scanning and forecasting than on understanding and predicting their environment (Milliken, 1987). Additionally, Cameron (1986) reports that environmental turbulence is a major negative influence on morale in organizations. The reason may be that it distracts managers from the human relations values. The result is an increased emphasis on the rational goal value. Buenger et al (1996) proposed two opposite relationships: (1) a positive relationship between an emphasis on human relation value and complex training demand of an organization and (2) a negative relationship between an emphasis on rational goal value emphasizing control, planning and productivity and complex training demand of an organization (Qinn & Rohrbaugh, 1983). Surprisingly, their analysis found that both relationships were significantly positive. This result showed that, as a reaction to environment uncertainty, either an emphasis on human relation value or on rational goal value will lead to high complex training demand which can be considered to have interactional relationship with pre-training motivation of the organizational members.

In sum, the environment uncertainty has both direct effect on organizational members’ pre-training motivation by decreasing their KSAs or indirect effects on pre-training motivation through the organization emphasized values systems. That allows me to propose the following proposition.

**Proposition 1:** Given the organizational member’s belief that training can be beneficial, the organizational members’ perceived environment uncertainty is positively associated with organizational members’ pre-training motivation. Particularly, the members of organization in highly uncertain environment will have higher pre-training motivation than that of the members of the organization in low uncertain environment.

The Organizational structure and Pre-training motivation

Organizational structure, defined as “the recurrent set of relationships between organization members” (Donaldson, 1996, p. 57), is one of the most ubiquitous aspects of organizations. Donaldson noted that structure includes—but is not limited to—power and reporting relationships such as those identified in organization charts, behaviors required of organization members by organizational rules, and patterns of decision making (e.g., decentralization) and communication among organization members. Further, it encompasses both formal and informal aspects of relationships between members. The most prevalent distinction for describing fundamental differences in organizational structure is that of mechanistic and organic structural forms. It is important to note that these two structural forms represent ends of a continuum, not a dichotomy. No organization is perfectly organic or mechanistic; most display some characteristics of both, and intermediate stages exist between the two archetypes (Ambrose & Schminke, 2003).

Mechanistic structure is characterized as rigid, tight, and traditional bureaucracy. In mechanistic settings, power is centralized, communications follow rigid hierarchical channels, managerial styles and job descriptions are uniform, and formal rules and regulations predominate decision making (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). Organizational members will be likely dependent on their top
managers in decision making when facing a performance deficiency rather than looking for an innovative solution or think about develop their own KSAs to meet the performance expectation. Furthermore, because in mechanistic structure formal rules and regulations predominate decision making, it is likely that the mechanistic organization will emphasize the goal rational value system which pay less effort on developing the internal human resources than do the other system such as human relation value or open system (Milliken, 1987).

By contrast, organic organizations are characterized by flexible, loose, decentralized structures. Formal lines of authority are less clear, power is decentralized, communication channels are open and more flexible, and formal rules and regulations take a back seat to adaptability in helping employees accomplish goals (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). It is clear that this kind of structure supports the human relation value and encourages the self development of organizational members as well. Employees have more authority to make decision and thus, more self-efficacy to solve the performance deficiency by self-development rather then relying on the top managers. Colquitt et al (2000) found a significantly positive relationship between pre-training self-efficacy and pre-training motivation. Based on those premises, I argue that the members of organic organizations will have higher pre-training motivation than that of the members of the mechanistic organizations. Thus, the following proposition is offered:

**Proposition 2**: Given the organizational member’s belief that training can be beneficial, the dimension organic-mechanistic of organizational structure will be associated with motivation of the organizational members. Particularly, the pre-training motivation of the organizational members in organic organization will be high and will be low in mechanistic organization.

The mediating role of organizational structure in the relationship between perceived environment uncertainty and pre-training motivation

According to Holmbeck (1997), a mediational model is a causal model, whereby it is hypothesized that A "causes" B and that B then "causes" C. Four conditions must be met for B to be a mediator: (1) A (predictor) is significantly associated with C, (2) A (predictor) is significantly associated with B, (3) B is significantly associated with C (after controlling for A) and (4) The impact of A on C is significantly less after controlling for B (Holmbeck, 1997).

To find support for the mediating role of organizational structure, I first examine the effects of perceived environment uncertainty on that construct. Contingency theory suggest that perceived environment uncertainty affects organizational structure, that administrators de-sign organizational structures such that the organization will be able to more effectively respond to environmental demands, and that they do this in accord with their perceptions of the environment. In general, it is argued that the more uncertainty that is perceived, the more will be the looseness or flexibility or "organicness" of the organizational structure, that is, that a positive relationship exists between these variables. For example, on the basis of a number of field studies Osborn and Hunt (1974) concluded that either perceived or objective environmental uncertainty is a determinant of organizational structure. In particular they stated (1974: 232):

“The work of Burns and Stalker (1961), Chandler (1962), Emery and Trist (1965), Lawrence and Lorsch (1967), and Neghandi and Reiman (1973), among others, has indicated that as [the task environment] becomes more dynamic, the organization must become not only more receptive to change, but alter its internal structure and operations to maintain and/or establish a high survival potential.”
If various structures are differentially effective in processing information to reduce decision-making uncertainty, then the information processing capabilities of structure would need to be consistent with the uncertainty perceived in the environment (Koberg, 1987). An organic structure, with its low degree of formality and high degree of information sharing and decentralization, enhances an organization's flexibility and ability to adapt to continual environmental and uncertainty (Mintzberg, 1979). Thus, the conceptual studies support the positive relationship between perceived environment uncertainty and organic organizational structure.

From the empirical perspective, the field studies of Duncan (1971), using data from 22 decision groups, and Khandwalla (1972), using data from 29 manufacturing firms, both found that increased perceived uncertainty was correlated with less mechanistic structures for effective organizations, thus apparently supporting the perceived environment uncertainty influences structure argument. Leifer and Huber (1977) in a field study comprising 12 work units (182 people) working in a health and welfare organization found supports for the positive relationship between perceived environment uncertainty and organic organizational structure.

I also argue that when the environment becomes more uncertain, if the organization structure does not change accordingly and gradually from low to high organic, the effects of perceived of environment uncertainty on pre-training motivation will be less than the case that the organizational structure becomes more organic. It is clear that when the perceived environment uncertainty increases, first the organizational members pre-training motivation will increase accordingly. However, if the internal environment (i.e. organizational structure) does not favor the learning activities, the pre-training motivation will decrease over time. Departing from this point, plus the positive relationship between perceived environment uncertainty and pre-training motivation (Proposition 1) and the positive relationship between organic structure and pre-training motivation (Proposition 2), I propose the following proposition about the role of organizational structure in the relationship between perceived environment uncertainty and pre-training motivation.

Proposition 3: The organic – mechanic dimension of the organizational structure will mediate the relationship between perceived environment uncertainty and pre-training motivation of the organizational members.

The Organizational Strategic Choice and Pre-training motivation

This part is to examine the effects of organizational strategic choice on the organizational members’ pre-training motivation. There are two dimensions of the organizational strategic choice discussed in theory: build versus harvest and differentiation versus low cost. The mission of the "build" strategy is to gain market share often at the expense of short-term profitability and cash flow. The mission of the "harvest" strategy is to maximize short-term profits and cash flow, often sacrificing market share (Glueck & Jauch, 1984; Govindarajan, 1986; Hofer & Schendel, 1978). The build/harvest strategic missions do not describe how the firms compete, but only indicate the intended outcomes (Govindarajan, 1986). Thus, this dimension is not appropriate to be considered for its effects on the pre-training motivation of the organizational members which is depending on how the organization selects a long-term strategy to achieve the strategic goals.

Porter (1985) proposed two generic competitive strategies that describe a means for attaining the desired out-comes: low-cost and differentiation. This dimension is more appropriate for a discussion about its effects on pre-training motivation because it emphasize on the means, rather than the expected outcomes. For this reason, only the low-cost and differentiation strategies are considered in this paper.
A strategy of differentiation is defined as an attempt to offer a product that is perceived industry-wide as being unique (Porter, 1980). This strategy requires an external orientation and a creative flair in order to deliver a unique product to the customer. Since the differentiating firm does not make standard products, it needs to know both what types of products customers want and what customers think about the products it makes. There are multiple approaches to differentiation; it can be based on the product itself (i.e., technology, design, quality), marketing approach, delivery system, or customer service. A successful differentiator will seek approaches that lead to a price premium greater than the cost of differentiating. Considering that there are numerous ways of achieving and maintaining uniqueness in the marketplace, a differentiator will require a relatively large information-processing capacity to deal with the many available options. The logic of the differentiation strategy requires that a firm choose attributes on which to differentiate itself that are different from its rivals. The options available to a differentiator with respect to what unique product features to offer normally would be greater than those available in the case of a low-cost strategy. Thus, information-processing requirements will be huge in the case of organization following a differentiation strategy. The consequence is that, the member of the organization following the differentiation strategy will need great competency in all information related task such as collecting and processing.

Achieving differentiation sometimes may preclude gaining a high market share. It often requires a perception of exclusivity which is incompatible with high market share (Porter, 1980). This exclusivity, in turn, may require unique product design, distinctive styling, and sophisticated promotional appeal as well as manufacturing craftsmanship, multipurpose equipment, high quality materials, and extensive product research and development. The lower volume of production, combined with an organizational emphasis on special product characteristics and flexibility/adaptiveness toward the marketplace, suggests that differentiation strategy will lead the organization to an emphasis on human relational value system, which in turn creates a favorable environment for a complex training demand to develop (Buenger et al., 1996).

In contrast, a strategy of low cost signifies an attempt to sell an essentially undifferentiated product at lower-than-average market price (Porter, 1985). Low-cost producers typically sell a standard, or no-frills, product and place considerable emphasis on reaping scale or absolute-cost advantages from all sources. Low-cost strategy implies tight control systems, overhead minimization, pursuit of scale economies, and dedication to the learning curve; these could be counterproductive for a firm attempting to differentiate itself through a constant stream of creative new products (Porter, 1985). For a low-cost strategy to be successful, managers must direct their attention to the internal aspects of their organization, primarily to the production and engineering functions.

Achieving a low-cost position often requires a high, relative, market share or other advantages, such as favorable access to raw materials. It may require designing standard products for ease in manufacturing, maintaining a wide line of related products to spread costs, and servicing all major customer groups in order to build volume (Porter, 1980). Large production volume justifies investing in modern, efficient equipment using conveyorized assembly lines with modularized components for easy expansion of capacity. Equipment is usually of a highly specialized type (although this can be overcome with more expensive flexible manufacturing systems) and the skills required to operate it are generally low. Workers can be relatively unskilled and the discretion of people will be limited. Hence, in terms of competitive strategy, a strategy of differentiation is likely to make the intra-organization’s technology more akin to a job shop, small volume, batch type of operation. A low-cost strategy is more likely to require a greater reliance on standardization, routinization, and mass production. Thus, it is clear that organizations following a low-cost strategy do not create an environment that favors the learning
activities as well as the pre-training motivation of the organizational members. Generally, differentiation and low-cost strategies are distinct and have different effects on pre-training motivation of the organizational members as proposed in the following proposition.

**Proposition 4**: The pre-training motivation of organizational members in the organization following the differentiation strategy will be higher than that of organizational members in the organization following the low-cost strategy.

The moderating role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation

The characteristic of uncertainty environment which is mostly related to a differentiation strategy is the information scarcity. Given that the organization does not change from differentiation to low-cost strategy, the increase of perceived environment uncertainty place a greater demand of on the organizational members’ competency to collect, to filter and to process the required information to maintain the competitive advantage. Eisenhardt (1989) found that successful decision-makers in high-velocity environments use more information, consider more alternatives, and seek a greater amount of advice. Instead of departing from the analytical requirements of comprehensive decision-making, they accelerate their cognitive processes. The quick decisions resulting from comprehensive decision processes lead to better performance (Goll & Rasheed, 1997). Further, differentiation firms rely most on the application of unique technology to win the target market; in the high uncertainty environment, that the technology changes rapidly forces the firm keep continue training their employees to acquire adequate KSAs to run the new technology. In contrast, when the environment becomes highly unfavorable (i.e. high uncertainty), the low-cost firms may try to reduce the cost by cutting-off production or decreasing market size. Those reactions will lead to the decrease of the pre-training motivation of the employees.

According to the expectancy theory (Vroom, 1964), because improving the organizational members’ competency in information related task will help improve the differentiation organization’s performance, both the organization and its members will favor the employee development activities. In contrast, the low-cost organization will not favor training their employees in uncertainty environment because of the cost increasing; that will decrease the pre-training motivation of their employees. It is predicted that, when the environment is highly uncertain, the pre-training motivation is expected to be higher in differentiation than that in the low-cost organizations. Thus, the strategic choice of the organization will significantly affect the relationship between the perceived environment uncertainty and pre-training motivation of the organizational members. That allows me to propose the following proposition about the role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation.

**Proposition 5**: Organizational Strategic Choice will moderate the relationship between perceived environment uncertainty and pre-training motivation of the organizational members. Particularly, the relationship between perceived environment uncertainty and pre-training motivation of the organizational members will be stronger in differentiation organizations than that in the low-cost organizations.

The moderating role of strategic choice in the relationships between organizational structure and pre-training motivation

There is theoretical foundation for the argument that the differentiation strategy favors the highly organic organizational (low mechanic) structure and the low-cost strategy favors the low organic
structure (high mechanic). The differentiation strategy relies on the less formalized structure and gives more autonomy to the employees whereas the low-cost emphasize the standardization of the production process and limit the discretion of people (Govindarajan, 1986). Furthermore, as argued above, the differentiation firms tend to emphasize the development of their human resources while the low-cost firms tend to cut any activities that may increase their production costs. It is clear that given a constant level of an organization in the dimension organic-mechanic structure, the organizational strategic choice significantly affect the relationship between this dimension and pre-training motivation of organizational members. Departing from this point, plus the high pre-training motivation in differentiation firms and low pre-training motivation in low-cost firms (Proposition 4), I propose the following proposition about the moderating role of strategic choice in the relationships between perceived environment uncertainty and pre-training motivation.

Proposition 6: Organizational Strategic Choice will moderate the relationship between the dimension organic-mechanic of organizational structure and pre-training motivation of the organizational members. Particularly, the relationship between this dimension and pre-training motivation of the organizational members will be stronger in differentiation organizations than that in the low-cost organizations.