A CORRELATIONAL STUDY OF LEADER BEHAVIORAL RESPONSE TO SPIRITUAL VALUES IN DRIVING ORGANIZATIONAL PERFORMANCE

by

Harold Rivera Mulero

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Management in Organizational Leadership

UNIVERSITY OF PHOENIX

February 2010
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Approved:

Daniel A. Kealey, Ph. D., Mentor

Judi Neal, Ph. D., Committee Member

Gail A. Zwart, D. PA., Committee Member

Accepted and Signed:

Daniel A. Kealey

Date

Accepted and Signed:

Judi Neal

Date

Accepted and Signed:

Gail A. Zwart

Date

Jerry Moreland, Ph. D.
Dean, School of Advanced Studies
University of Phoenix
ABSTRACT

Workplace spirituality has been argued to have practical utility in improving organizational performance but conclusive evidence is lacking. Using SEM this correlational study correlated the variables in the theory of planned behavior to the leader’s use of spiritual values in driving organizational performance. The sample \((N)\) was 105 leader-subordinate pairs from Puerto Rico. Perceived behavioral control was positively associated with the intention to use spiritual values \((B = 1.09, t (104, 1) = 5.04, p < 0.05)\). The leader’s attitude towards referent values was positively associated with actual behavior \((B = 0.46, t (104, 1) = 4.00, p < .05)\). These results demonstrated that convictions about spiritual values, controllability and self-efficacy can strongly influence the leader’s behavior to use spiritual values to drive organizational performance.
DEDICATION

This work is dedicated to my family, whose support made it possible for me to persevere throughout this journey. To Carlos and Margarita, my parents, who somehow instilled in me the value of perseverance, and who provided words of encouragement, emotional, and financial support, I extend my infinite gratitude and love. To Tiffany and Harold, my loving children, may this small but not meaningless effort serve as a source of inspiration and encouragement in your own individual journey. The path to wisdom begins with openness to the truth. You are the source from which my spirit is constantly nourished. To Gie, my companion throughout this journey, who never complained, which took care of me in my darkest moment, and gave me the space to be, thank you; our hearts will always be united. I would also like to dedicate this work to all of those who so arduously search for a way to bridge the transcendent aspects of our humanity with scientific rigor.

May the love of God that shines in all hearts be with you always.
ACKNOWLEDGMENTS

A big journey often needs preparation and support from others. I would like to acknowledge the efforts of my committee. Dr. Daniel A. Kealey, my mentor, who provided nurturing, motivation, support, and guidance to complete the dissertation process. A few words go a long way when working on your own, thank you. Dr. Gail Zwart, you were my first inspiration; is not easy to address a quantitative research with such an offbeat topic as spirituality in an academic environment where many still see it as strange; thank you. Dr. Judith Neal, you were my refuge island when I thought I was lost, thank you for helping me steer the boat in the right direction. Also, thank you for your words of encouragement, for being a channel of light, for showing me what the possibilities could be, and for being who you are in this planet.

I would like to acknowledge an unseen contributor to the completion of this work, known to my heart and one with my spirit. Thank you for sustaining this humble servant, and nourishing my soul. To you God, I humbly offer myself to do your work.
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CHAPTER 1: INTRODUCTION

In the United States work has been, for the most part, a secular activity where individuals spend most of their lives and find a sense of identity (Neal, 2006). Since the early 1990’s, the interest in workplace spirituality has increased, fueled in part by changing demographics and aging of the workforce (Neal, 2006). Baby boomers will represent over 20 million workers or 19.1 percent of the labor work force, by the year 2012 (Toosi, 2004). They have held an average of 10.2 jobs between the ages of 18 to 38 (United States Department of Labor, 2004) and have matured amidst instability in many industry sectors.

These circumstances have led to a change in loyalty and expected financial rewards, resulting in an exodus to alternate means of employment and a search for new meaning in the workplace (Palladino, 2006). This search for meaning has been reflected in a surge in workplace spirituality in organizations, not only as a practical means to address meaning in the workplace, but as a legitimate topic of empirical study (Sanders, Hopkins, & Geroy, 2004). Shifting cultural values have also played a role in bringing workplace spirituality to the forefront of management research. This shift is the result of three distinct cultures described by Ray and Anderson (2000) as: the moderns, the traditionals, and the cultural creatives.

Based on data covering a 14 year period, Ray and Anderson (2000), classified cultural creatives as comprising over 26 percent of the population in the United States and between 30 to 35 percent that of Western Europe. This indicated a cultural shift towards more value being placed on nature, authenticity, peace, relationships, feminism, social justice, social responsibility, and in the context of this correlational study, on
workplace spirituality (Aburdene, 2007).

The use of organizational culture as a determinant of performance continues to be a topic of interest for practitioners and academicians to this day (Fairbairn, 2005; Lynes & Dredge, 2006; Lyon, 2004; Nahm, Vonderembse, & Koufteros, 2004; Trauter, 2006; Yoshimori, 2005). Organizational performance can be related to certain organizational outcomes such as strategies, goals, and objectives and can be measured by attributes such as quality, internal operations, customer focus, human resources and finance (Matherly, Fry, & Ouimet, in press; Scott, 2003). Associated with culture are values, beliefs, behavior patterns, traditions, and norms, which come from the leader (Fry, 2003; Northhouse, 2001; Sarros, Gray, & Densten, 2002). As part of the organizational culture, workplace spirituality has been argued to have practical and ethical utility leading to performance in organizations (Fry, Vittuci, & Cedillo, 2005; Garcia-Zamor, 2003a, 2003b; Giacalone & Jurkiewicz, 2003; Jurkiewicz & Giacalone, 2004; Pfeffer, 2003). If spirituality is an underlying factor in organizational performance mediated by the organization’s culture, and there is a relationship between the leader’s beliefs and organizational culture, then the leader’s spiritual beliefs can be related to organizational values that lead to performance.

This correlational study intends to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. As the topic of interest, workplace spirituality will be looked at from the behavioral perspective of the leader, grounded in the culture and values of the organization. Support for this topic as valid for inquiry comes from Fry (2006), and Jurkiewicz and Giacalone (2004), who espoused a spiritual values framework for
improving organizational outcomes. The following sections in this chapter will discuss, among other things, the background and statement of the problem, the significance of this correlational study, the hypothesis being tested, and the theoretical framework. The chapter ends with a summary discussion of the material presented and presents introductory remarks to the literature review.

Background of the Problem

Although spirituality has religious connotations for some people, for many others, spirituality in the workplace is rooted in personal values and philosophies (Mitroff & Denton, 1999). Aburdene (2007) postulates the power of spirituality and the emergence of spirituality in the workplace as two major megatrends that have been impacted by socio-cultural changes in the last two decades, and that will shape lives for decades to come. However, academic studies of workplace spirituality are still relatively new and unformulated. Early literature has been largely anecdotal and conceptual, but efforts in the past decade have begun to coalesce key ideas and variables in this emerging area of interest (Neal, 2006).

The interest in workplace spirituality is reflected in the vast quantity of books and journals, and the propagation of workshops and seminars. Seminal work like Russ Moxley’s book, *Leadership and Spirit*, established how both leaders and followers must change in order for organizations to tap into and benefit from spirit and find meaning and purpose in what they do. Most recently, Judy Neal, CEO and founder of Spirit at Work released her book, *Edgewalkers: People and Organizations that Take Risks, Build Bridges, and Break New Ground*. In it, Neal describes the characteristics of what she terms *Edgewalkers*, individuals who have the foresight and hindsight to bridge market
data, trends, and envision the future across the organization at different levels. While working at the World Bank, Richard Barrett author of *Liberating the Corporate Soul: Building a Visionary Organization* instituted the Spiritual Unfoldment Society, signaling the importance of spirituality in business practice.

The development of workplace spirituality can be a competitive advantage in the marketplace as well as an important factor in management theories and models (Mohamed, Wisnieski, Askar, & Syed, 2004). A number of issues have only recently begun to impact working lifestyles and work ethics, including changes in the psychological contracts between employees and employers, the changing demographics towards an aging baby boomer generation, the turning of the new millennium, a growth in personal and self-help groups, and the effects of terrorism (Neal, 2006). This has resulted in some real effort to promote workplace spirituality in such companies as Southwest Airlines, AES, and the SAS Institute (Pfeffer, 2003). The role of leadership in workplace spirituality is now of interest to researchers (Driscoll & McKee, 2007; Fairholm, 2004; Fry, 2003; Fry et al., 2005; Giacalone, Jurkiewicz, & Fry, 2005; Hoffman, 2003; Rhodes, 2003; Sanders et al., 2004).

From a theoretical perspective, the link between spirituality and leadership has been addressed in the literature since the early 1990’s, but to this day there is no clear defined paradigm around the subject of spirituality in the workplace. Early researchers like Maslow (1998) had identified, in his hierarchy of needs, the need for self-actualization. Maslow had envisioned leaders that would be philanthropic, willing to help others, altruistic, intolerant of injustice, and ready to fight for what they believed to be true. More recently Sternberg (2003) postulated, in the balance of wisdom theory, five
components which reflect a leader’s wisdom: rich factual knowledge (reflecting the general and specific knowledge about circumstances of life and its distinctions), rich procedural knowledge (reflecting knowledge on good judgment and strategies concerning matters of life), life span contextualism (reflecting knowledge about the contexts of life), relativism (reflecting knowledge in the differences in values, goals, and priorities) and uncertainty (reflecting knowledge on ways to manage uncertainty and unpredictability in life).

Spiritual leadership (Fry, 2003; Thompson, 2004), whole soul leadership (Fairholm, 2004), and King’s (2006) research between leadership, morals, and spirituality are some of the more recent constructs used to explain the links between spirituality, values, and organizational performance. From a social perspective, spirituality and work life are intrinsically intertwined. In a Gallup Poll, 48 percent of the respondents felt that they have had the occasion to talk about their religious faith in the workplace (Neal, 2005). Yet, nothing can be more elusive than a clear definition of spirituality, given the myriad connotations and symbols associated with it in both religious and secular domains. Definitions of spirituality are often polarized according to creed, origin, and spiritual practices meaning different things to different people (Jurkiewicz & Giacalone, 2004).

From early discoveries of ancient civilizations burial sites to Aristotelian discourses on essentialism, to its religious connotations in the Bible, to modern research in empirical science, spirituality is, for most human beings, a multidimensional issue difficult to capture in meaning (Joseph, 2001). A distinction is called for between spirituality and religion as the terms often get intermingled. For Klenke (2003), religion
depends on rites and scriptures, often specific to a given culture. Spirituality, in contrast, is inclusive, it allows the embracing of diverse beliefs, cultures, and promotes interconnectedness; “spirituality is usually perceived as allowing for and supporting religious beliefs, whereas the reverse is not always the case” (Klenke, 2003, p. 59).

Certain industry sectors already use materials containing spirituality content in areas such as health care, education, psychology, social work, and business such that spirituality is being moved from a personal pursuit to a business practice (Klenke, 2003). Nurses, doctors, and social work professionals are required to have some basic understanding of spiritual matters in order to better understand their patients and clients (Klenke, 2003). Integrating eastern and western spiritual practices in mental health services and practices is a current social trend (Blanch, 2007). In academia, curricula are including material relevant to spirituality, and courses are offered to diverse interest groups including business executives and MBA candidates (Giacalone & Jurkiewicz, 2003). From the metaphysical standpoint, psychologists and psychiatrists are experiencing a renewed interest in the notion of the human spirit. This renewed interest in spirituality by leaders and organizations poses many challenges.

Debacles in financial systems, fueled by events such as the dot com fiasco, Enron’s financial scam, and Worldcom’s downfall, create a sense of uncertainty and insecurity (Capelli, 2009). Social tragedies like the September 11th attack on the United States bring the reality of terrorism not only to remote parts of the globe but closer, to neighborhoods and back yards. Global events, like the rise of Japan and other eastern economic powers, have undermined the strength of North American markets (Guillén & García-Canal, 2009). If workplace spirituality is to be of any value in leadership research,
much effort is needed in the conceptual, empirical, practical, and educational domains (Giacalone & Jurkiewicz, 2003).

Statement of the Problem

A Harvard Business School study reported that spirited workplaces outperformed those with more traditional cultures by 400 to 500 percent in earnings, return on investment, and shareholder value (Garcia-Zamor, 2003a). Currently, Fry’s (2003) spiritual leadership model has been used in the Army and the Tomasso Corporation as a foundation for driving organizational outcomes (Fry et al., 2005; Matherly et al., in press). Organizations such as Intel, Ford, Texas Instruments, American Airlines and others all have some type of spirituality-based practices (Aburdene, 2007). But overall, the problem is that “organizations have not been seeking to integrate spirituality into their workplaces to any discernible degree . . . and while approbations abound, conclusive evidence connecting workplace spirituality with bottom line performance is lacking” (Jurkiewicz & Giacalone, 2004, p. 130).

In Puerto Rico, this problem impacts the population of the organizational leader and his/her subordinates in public and private organizations, due to financial, infrastructure, economic growth, and tax law challenges (Román, 2006; Teissionniere, 2005). These organizations have a large spiritual-moral base (Campesino & Schwartz, 2006) but lack any discernible strategies for improving performance by capitalizing on workplace spirituality. There are many possible factors contributing to this problem, among which are differences in conceptual definitions, the multiplicity of competing theories and models, selection of measurement tools, legal concerns concerning the separation of church and state, and the leader’s behavior (Giacalone & Jurkiewicz, 2003;
This correlational study instituted a correlational investigation into Puerto Rico’s public and private sector executive leaders and their subordinates. The study was predictive an explanatory in nature. It explored the extent to which the leader behavioral response to improve organizational performance co-varied with spiritual values. It also explored the predictability of the leader’s behavioral response from attitude, subjective norms, and perceived behavioral control. It contributed to the body of knowledge by providing a better understanding on the intervening constructs of workplace spirituality on organizational performance.

Purpose of the Study

The purpose of this study was to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. Creswell (2004) suggests three criteria to support the decision-making process of choosing a quantitative research approach: fitting the approach to the audience, relating the researcher’s experience to the methodology, and matching the problem to the approach. The current study was written for a business and academic audience which lacks accessibility to quantitative studies in the area of spirituality, specifically relating it to organizational performance and leadership (Jurkiewicz & Giacalone, 2004) thus fitting the approach to the audience. Fitting the methodology to the researcher’s experience is also a condition met in the current study given the researcher’s previous experience in statistical methods.

In matching the problem to the approach Creswell (2004) suggests that a quantitative approach be used when variables are being measured, the impact of the variables on a particular outcome are being assessed, when testing theories, and when the
results are applied to a large number of people. The current study assessed the relationship between the dependent and independent variables as described in the constructs of the theory of planned behavior (TPB) constructs in a large population and assessed the impact of these constructs in the leader’s use of spiritual values, thus meeting all of Creswell’s criteria for a quantitative approach. The use of quantitative approaches is also supported in the literature, and in fact, several quantitative approaches have been used to study leadership and spirituality in the workplace (e.g., Ashmos & Duchon, 2000; Fry et al., 2005; Mitroff & Denton, 1999). Within the quantitative approach, a correlational design was chosen. Correlational designs can be explanatory and predictive (Creswell, 2004).

The central research focus in the explanatory design is to find the extent to which two or more variables co-vary (Creswell, 2004). This correlational study was explanatory because it explained the relationship between the dependent and independent variables within the constructs of the TPB. The prediction design identifies variables that will positively predict an outcome or criterion (Creswell, 2004). This correlational study was predictive because it analyzed SEM coefficients in the equations between dependant and independent variables. The use of a quantitative explanatory and predictive design was thus warranted, as it supported in further understanding the role of values in the different constructs of workplace spirituality and their influence on leadership and organizational performance.

Participants in the study were drawn from the upper ranks of policy-making leaders in public administration and private organizations in Puerto Rico. For the public sector, these comprise directors of government owned or semiprivate agencies, and in the
private sector companies, these would be general managers, business owners, or CEO’s. The dependent variable was the leader’s use of spiritual values, also addressed as referent values, to drive organizational performance. The independent variables were the leader’s attitude, subjective norms, and perceived behavioral control influenced by the leader’s behavioral, normative, and control beliefs. These variables stemmed from Ajzen’s (2005) theory of planned behavior (TPB), which was used as one of the theoretical constructs. In addition, the current study also looked at the relationship between the dependant variable and the subordinate’s perception of the leader’s use of spiritual values, the leader’s attitude towards spiritual values, and the subordinate’s perception on the leader’s attitude towards spiritual values.

**Significance of the Problem**

Leadership constructs like transformational leadership, charismatic leadership, DePree’s leadership model, and primal leadership share common elements such as: relationships, connectedness, power, influence and individual and organizational transformation (Klenke, 2003). These constructs rely on the leader and interaction with followers as the principal vehicle for instilling values into the organization. Jurkiewicz and Giacalone (2004) suggest studying the moderating variables of workplace spirituality and the leader’s spiritual values to understand the relationship between spiritual values and performance. The current study contributed to understanding the interactive effects of personal spiritual leadership values, which are present to some extent in most leaders, with organizational performance. It also studied the antecedent variables that mediate between the leader’s actual behavior in using these values and his/her personal beliefs.
Leaders can use spirituality as a moral foundation for actions and decisions that foster genuine tolerance and respect (Thompson, 2004). The current study contributed to an understanding of the factors that mediate in a leader’s willingness to use spiritual values that, in turn have an impact on decision-making ability. A review of the literature shows that an interest exists for increasing the knowledge and practical applications of management and leadership constructs, and in understanding spiritual diversity and practices in Puerto Rico (Campesino & Schwartz, 2006). Findings from the current study could help in the following: bridging the gap between the personal spiritual practices of Puerto Rican citizens and the normative aspects of the country’s organizations; the integration of spirituality, leadership, and organizational performance, three seemingly important constructs that are often treated independently by academics as well as practitioners; the selection of leaders that will be more prone to use spiritual values as a resource for improving organizational performance.

Nature of the Study

The purpose of this correlational study was to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. The correlational research design form was best suited to address the problem. The TPB, one of the theoretical constructs, was used as the explanatory and/or predictive model. According to Creswell (2004) the thrust of explanatory designs is to find the extent to which two or more variables co-vary. A prediction design is used to predict one or more variables that will have a positive effect on a given outcome. The use of prediction research design is well-established in the analysis of variables using the TPB (e.g. Ajzen, 1991; Rhodes & Courneya, 2004; Rivis
& Seeran, 2003; Sheeran, Trafimow, Finlay, & Norman, 2002).

Other studies have used quantitative explanatory analysis to explain the relationship between variables such as spirituality, leadership, values, and organizational performance. Sanders et al. (2004) used a quantitative methodology in a correlational study to understand the causal relationship between leadership, spirituality and commitment. Walumbwa, Wang, Lawler, and Shi (2004) used a quantitative methodology in a correlational study to analyze the relationship between transformational leadership and work outcome. Perrone, Webb, Wright, Jackson, and Ksiazak (2006) used both quantitative and qualitative methodologies to explore the relationship between spirituality, work, family, roles and life satisfaction among gifted adults. Sawatzy, Ratner, and Chiu (2005) used a quantitative meta-analysis to investigate the relationship between spirituality and quality of life. In two quantitative studies Van Dick, Frese, Baer, and Sonnentag (2005) explored the relationship between error management methods and performance in organizations. Although there is some question to the usefulness of quantitative methodologies in identifying the scope, depth, and hidden aspects of culture (Kwan & Walker, 2004), quantitative approaches have been applied to relate cultural values to performance (e.g., Kwan & Walker, 2004) and represent the best methodology for the current study.

Qualitative, mixed-methods, and other quantitative methodologies were considered. The qualitative designs considered were ethnographic, grounded, and narrative search designs. Experimental quantitative designs were also considered. Creswell (2004) provides a succinct explanation concerning the selection and use of each of these research designs. As Creswell explains, ethnographic designs are mostly
concerned with studying specific sets of populations in the environments where they function, grounded designs are used to generate a broad conceptual theory about a topic, and narrative search designs inquire and describe the lives of a specific set of individuals through stories and written narratives. According to Creswell, experimental designs use control and intervention groups to determine the treatment effects on a specific desired outcome, and mixed-methods use both qualitative and quantitative data in a single study.

Qualitative designs were not considered, given the purpose and nature of the problem. The use of experimental research was not possible given that participants in the study would not be available to work in intervention and control groups. Assessing the outcome of an intervention for an experimental design is also beyond the scope of the researcher’s time limits and resource availability. Qualitative or mixed methods designs were discarded because the nature of the problem, the measurement tools, time constraints, and subject availability also made these impractical.

Research Questions

The constructs in the TPB (Ajzen, 2005) provide a working platform from which to formulate research questions that link beliefs and organizational values to a leader’s behavioral response. Using the TPB’s theoretical construct, a research model was constructed (Appendix C) from which appropriate research questions were inferred, as follows: (a) Which TPB variables influence the leader’s intention to use spiritual values as part of the organizational culture to drive organizational performance? (b) Do leaders in Puerto Rico use spiritual values in their organizational culture to drive organizational performance? (c) Can the TPB be used as a predictive model for the use of spiritual values to drive organizational performance?
Hypotheses

The predictive and explanatory nature of this correlational study requires a set of hypothesis to test both the relationship among the different variables and the predictive capability of the research model (presented in Appendix C). Hypothesis $H1$ was designed to test the explanatory nature of the study. Hypothesis $H2$ tested the predictability of the model. In $H1$, a relationship was sought between intention, the proximal antecedent of actual behavior, and the constructs of the model: attitude, subjective norms, and perceived behavioral control. As part of the testing for $H1$, the relationship between these constructs and their respective belief antecedents was explored. The following correlations were sought: behavioral beliefs to attitude, normative beliefs to subjective norms, and control beliefs to perceived behavioral control.

In $H2$, the predictability of the model was tested by analyzing coefficients in the SEM equations between the dependant variable assessing the behavior of the leader to drive organizational performance (the leader’s spiritual values to drive outcome measures related to financial success, operational effectiveness, customer focus and organizational well-being) and the independent variable of intention. The correlations between the subordinate’s perceptions of the leader’s actual behavior, the leader’s own assessment of her/his actual behavior, and intention was explored. According to Ajzen’s (2005) theory of planned behavior, there should be positive relationships between the constructs leading to the actual behavior being assessed. Intention, the proximal antecedent to actual behavior, was expected to have a significant correlation with actual behavior. The study hypotheses are as follows:

$H1_0$: There is no correlation between the leader’s intention to use spiritual values
in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H1_a \): There is a correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H2_0 \): There is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

\( H2_A \): There is a correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

Theoretical Framework

At a conceptual level, this correlational study used theories and models derived from social psychology, leadership, and workplace spirituality research. From social psychology, the theory of planned behavior (Ajzen, 2005) provided the theoretical constructs necessary to correlate the dependent and independent variables within a well documented and tested model. From leadership research, it used Fry’s (2003) spiritual leadership model constructs to understand the relationship between workplace spirituality values and organizational performance, and as a source of workplace spirituality values leading to organizational performance. From workplace spirituality, Jurkiewicz and Giacalone’s (2004) workplace spirituality values framework was used to establish some of the workplace spirituality values used.

One common element of these theoretical frameworks is the organizational leader, who has ultimate responsibility for the transformation of resources into useful contributions to the stakeholders of the organization. Conceptual and theoretical
developments in these areas have led to the development of a spiritual construct pertaining to the work environment and organizations at large (Giacalone & Jurkiewicz, 2003). This spiritual-work-leadership construct is a nascent development within the management and leadership disciplines (Fry, 2003) often typified as workplace spirituality.

Workplace Spirituality

The use of spirituality characteristics or values within the organizational context happens within a larger religious-spiritual domain akin to most individuals regardless of their religious or spiritual affinity (Mitroff & Denton, 1999). A better understanding of how these values evolve from concept to action requires and inquiry into physiological, philosophical, and workplace domains. From a physiological perspective, this religious-spiritual domain is rooted in neurological processes in the amygdala, hippocampus, and temporal lobe (Joseph, 2001). These areas of the brain are responsible for religious, spiritual, and mystical states: “Limbic and temporal lobe structures…serve as a ‘transmitter to God’ and that the evolution of these structures made spiritual experience possible” (Joseph, 2001, p. 105). From a philosophical perspective, perennial philosophy postulates that ultimate reality and the essence of human nature derive from Absolute Spirit, Pure Consciousness, or the Universal Mind accessed through the mystical teachings of world’s religions like Christianity, Hinduism, Buddhism, Judaism, and Islam among others (Kwang-Kuo, 2005). It also addresses the concept of transcendence, a sense of connection with a higher reality or the cosmos, a common theme in the workplace spirituality literature (Kelemen & Peltonen, 2005).

From the workplace perspective, descriptive studies have focused on the meaning
and specific manifestations of spirituality in organizations (Kelemen & Peltonen, 2005). Studies by Mitroff and Denton (1999), Ashar and Lane-Maher (2004), and Moore and Casper (2006) among others, have attempted to provide quantitative and qualitative data to support this emerging construct. The work of Pfeffer (2003), Giacalone and Jurkiewicz (2003), Fry (2003), and Marques et al. (2005) have supported a practical look at workplace spirituality suggesting a relationship to work outcomes such as organizational performance and employee motivation. From the leadership perspective, leadership models like transformational leadership, servant leadership, principle-centered leadership, spiritual leadership, among others, manifest spiritual values as part of the leader’s role.

Organizational Values, Leadership, and Performance

The transformation of values to behaviors to organizational and individual performance is well documented in the literature within the organizational culture context. Research by Rokeach (1979) asserts that the concept of values can be generalized to individuals, groups, organizations, institutions, countries, and societies. In value theory, these values are lasting beliefs about end states of existence or generalized modes of conduct providing the means to study organizations as social structures (Rokeach, 1979).

Schein (1992) suggests a levels view of organizational culture. In this view, cultures can be analyzed at the level of artifacts, espoused values, and basic underlying assumptions. Basic underlying assumptions reflect what the individual says with no necessary relationship to what the individual does while espoused values are taken-for-granted beliefs of the organizational culture (Schein, 1992). Espoused values and basic underlying assumptions reflect someone’s personal beliefs. Within the organizational
context these culture-shaping values come from the leader (Fry, 2003; Northhouse, 2001; Schein, 1992).

For these organizational values to be acted on as behaviors, they must be shared and congruent with employee values (Fitzgerald & Desjardins, 2004; Schein, 1992). At the individual level “organizational values that are congruent with employees’ values have been shown to increase employee satisfaction, commitment, and performance outcomes” (Schein, p. 121). Individual and organizational performance is intrinsically linked by the normative and operational rules of behaviors, which are manifested in the organization as espoused values and basic assumptions.

Motivation and Behavioral Prediction

Research on employee motivation in organizations started as early as 1911 with Taylor’s seminal work *The Principles of Scientific Management* (Chase, Jacobs, & Aquilano, 2006). Other organizational-motivational theories include the following theories: Cussin’s approach, Maslow’s hierarchy of needs, McGregor’s theory X and theory Y, Vroom’s expectancy theory, Herzberg’s hygiene theory, Locke’s goal setting theory, and Bowey, Thorpe, and Hellier’s reactance theory (Halepota, 2005). In general, these theories helped explain the relationship between employee rewards, performance, and job tasks but did not fully explain the antecedents for specific behaviors of the individual.

Recent motivational theories focus on the interaction of beliefs, values, and goals (Eccles & Wigfield, 2002). They are the basis for dispositional prediction of human behavior. Theories in this area tend to focus on self-efficacy beliefs, causal attributions, and goal setting in regulating behavior leading at completing a task (Eccles & Wigfield,
The current study used the theory of planned behavior (Ajzen, 2005) as the theoretical framework and the general prediction model explaining the leader’s behavior. This theory is an extension of the theory of reasoned action and establishes as a central tenet the individual’s intention as an antecedent to actual behavior. According to Ajzen (2005), the stronger the intention the stronger the likelihood that the behavior will be accomplished. Antecedents to intention are the attitude, subjective norms, and perceived behavioral control of the individual.

Definition of Terms

This section will define terms necessary for understanding the problem, purpose and methodology, as well as the geographical and sociocultural aspects, addressed in this correlational study.

Organizational culture. Culture refers to valid patterns of shared basic assumptions learned by a group to solve problems of external adaptation and internal integration. These patterns can be learned and taught to new organizational members as the correct way to perceive, think, and feel with respect to those problems (Schein, 1992).

Organizational leader. Executives in the top-most positions in their respective organizations reflecting Gardner’s (as cited in Bass, 1990) value-forming dimension of the leader’s task. Within this context, the leader-manager tasks can be summarized as follows: “envisioning the group’s goals, affirming values for the group, motivating the members, managing, achieving a workable unity among the members, explaining what needs to be done, serving as a symbol, representing the group, and renewing the group” (p. 386).

Leadership. The interaction of members of a group involving change in a
particular situation or in the perceptions and expectations of organizational members (Bass, 1990).

Values. “Generalized enduring beliefs about the desirability of certain models of conducts or end states of existence” applicable to individuals and organizations alike (Rokeach, as cited in Eccles & Wigfield, 2002, p.123). Common threads in the definition of values are: (a) concepts or beliefs, (b) end states that transcend specific situations, (c) guided selection or evaluation of a particular behavior or event, (d) they have an order of relative importance (Schwartz & Bilsky, 1987).

Spirituality in the workplace. The multiplicity of definitions of spirituality in the workplace is well established (Giacalone & Jurkiewicz, 2003; Marques et al., 2005; Mohamed et al., 2004). It is a common process for nascent paradigms to require further articulation and clarification (Kuhn, 1996). The definition used for the current study encompasses substantive and functional aspects expressed as an integration of Giacalone and Jurkiewicz (2003) and Ashar and Lane-Maher (2004) working definitions. “Workplace spirituality is a framework of organizational values evidenced in the culture that promotes employees’ experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy” (Giacalone & Jurkiewicz, 2003, p.13) “that can only be manifested when one is allowed to integrate his or her inner life with one’s professional role in the service of a greater good. It involves a desire to do purposeful work that serves others and to be part of a principled community” (Ashar, & Lane-Maher, 2004). The rational for the selection of this integrated definition stems from the recommendations of Giacalone and Jurkiewicz (2003). They espouse that the utility of a definition should
focus on both substantive—evoking the prevailing beliefs, emotions, practices, and relationships, and functional aspects—and on the practical uses of spirituality for the individual and the organization.

Organizational values. Organizational values are shared beliefs for what the organization stands for, takes pride in, and holds of intrinsic value (Rokeach, 1979). There are espoused values, which are those that are said or displayed but do not necessarily imply action. There are also shared assumptions, which are those values that become real to the organization’s individuals, are taken for granted, and become the reason for action at a conscious or unconscious level (Nahm et al., 2004).

Leader’s spiritual values. The leader’s spiritual values are overt or private beliefs that reflect the leader’s position with regards to spirituality in the workplace. They can be secular or non-secular spiritual perspectives “aimed at transcedence toward our ultimate values” (Harlos, 2000, p. 613) or personal expressions of ultimate concern (Harlos, 2000).

Organizational performance. Organizational performance can be related to certain organizational outcomes such as strategies, goals, and objectives (Scott, 2003). Although there are different ways to evaluate organizational performance, the current study will use those organizational attributes most typical in a strategic scorecard such as quality, internal operations, customer focus, human resources, and finance (Matherly et al., in press). The measures were interpreted by each participant as those put into practice in their organization. Given the multiplicity of possible ways to measure a given organizational outcome, measures were left at their most abstract level. Outcome measures were related to financial success, operational effectiveness, customer focus and
organizational well-being. Profitability (a measure of financial success), productivity and quality (measures of operational effectiveness), customer satisfaction (a measure of customer focus), and morale and employee satisfaction (measures of organizational well-being) were used as the operational variables for organizational performance.

Referent values. These represent, in aggregate, the spiritual values in Appendix A. This term is introduced into the current study to avoid common methods variance (CMV) issues. As explained elsewhere, the term spirituality is loaded with multiple connotations, definitions, and meanings. It represents different things to different people; some people ascribe religious overtones to its meaning while others see it as generalized values (Giacalone & Jurkiewicz, 2003; Mitroff & Denton, 1999). The term can lead to either positive or negative bias on behalf of the participant. Hence, the pilot study questions, consent form, and the questionnaire will omit the use of the term spiritual or spirituality.

Elicitation study. This term is used to make distinct the collection of participant information to be used in designing the indirect measures of the independent variables from the pilot study used to assess them.

Assumptions

Several assumptions were made in the current study. First, it was assumed that the participants would answer the questionnaires themselves in an honest manner and not pass them on to a second party to fill in. The nature of this study facilitates direct participation from the organizational leader and his/her subordinate and discourages second party involvement. Design considerations, such as confidentiality and consent, provided participants with the motivation to provide the information in an honest manner.

Second, it was assumed that participants understood sufficient English to answer
the questions in the survey. Even though Spanish is the first language in Puerto Rico, executive managerial positions in government and private organizations in Puerto Rico require, at minimum, a business level understanding of the English language. In addition, English is a mandatory subject in primary and secondary school and most college level textbooks in math and sciences are written in English.

Third, it was assumed that the participants had some view or perspective regarding their beliefs about spirituality, leadership, and organizational performance. As part of their managerial training and education, executive level positions require leadership and performance competencies. The nature of this study did not impose on participants a particular view about spirituality, just that they have some beliefs in this area.

Fourth, it was assumed that organizations used to access participant telephone numbers and email addresses would cooperate in providing information missing in their membership files. Also, endorsement was sought from these organizations to encourage member participation.

Fifth, it was assumed that the leaders had a role in determining how organizational objectives were to be met and that they used implicit or explicit beliefs in articulating a set of values which they used to drive performance. This condition implies that the leader worked within an organization for which he/she had responsibility over subordinates and that these subordinates had a formed point of view of the leader’s behavior in driving organizational performance, a natural condition of organizational life.

Limitations

This study was limited to voluntary participants who agreed to the informed
consent form. The study did not consider nonprofit organizations, religious organizations, start-ups, or organizations in which the leader had no direct control in setting organizational values. The study was limited to organizations in Puerto Rico that fitted the sample criteria. Generalization of results to other organizations in Latin countries that fit the sample criteria was not warranted given the different sociocultural factors between these countries and Puerto Rico. The commonwealth status that Puerto Rico has with the United States provides a unique political and economic relationship with vast implications for its social and cultural development.

Delimitations

The research was conducted with a random sample of active leaders that work in the private and public sectors in Puerto Rico, with organizations employing more than two people, a sales or service record of five years or more, and explicit or implicit performance indicators. This implies that the organizations where these leaders worked had some form of normative structure in place. This delimiting factor was important in maintaining the validity of the methodology and in simplifying the time frame for data analysis.

The current study examined variables pertaining to the constructs in the TPB namely: attitude, subjective norms, perceived behavioral control, and their belief antecedents (Ajzen, 2005). It also examined the subordinate’s perception on the leader’s use of spiritual values, the leader’s attitude towards spiritual values, and the subordinate’s perception on the leader’s attitude towards spiritual values. Other factors like the effect of past behavior on current behavior, the influence of religion, social, and cultural factors on the participant’s spiritual formation, and the participant’s expectancy were not examined.
Summary

Despite the amalgam of literature advocating the integration of spirituality into the workplace, “organizations have not been seeking to integrate spirituality into their workplaces to any discernible degree . . . and while approbations abound, conclusive evidence connecting workplace spirituality with bottom line performance is lacking” (Jurkiewicz & Giacalone, 2004). The purpose of this correlational study was to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. It contributed to understanding the interactive effects of personal spiritual leadership values, which are present to some extent in most leaders, with those of the organization. The dependent variable was the leader’s use of referent values to drive organizational performance. The independent variables were the leader’s attitude, subjective norms, and perceived behavioral control influenced by the leader’s behavioral, normative, and control beliefs. Chapter 2 provides a review of the literature guiding this correlational study.
CHAPTER 2: REVIEW OF THE LITERATURE

Leadership constructs rely on the leader and interaction with his/her followers as the principal vehicle for instilling values into the organization. Several of the studies presented here reviewed some of the constructs found in the literature that relate workplace spirituality and the leader’s role in the transformation of personal spiritual beliefs into organizational values that drive organizational performance. This was a study-by-study review of the literature, as recommended by Creswell (2004), which included germinal and historically significant reviews providing a developmental or evolutionary perspective on the topics discussed. Most of the theoretical works in this literature review followed an empirical focus or perspective. Broad untested theories were not represented here unless they represent significant contributions.

Spirituality in the Workplace

The topic of spirituality can be addressed from multiple perspectives. As a nascent development in the workplace its roots are still scattered through the social sciences. This literature review addressed those perspectives pertinent to this study’s purpose, namely: the philosophical, the workplace, and the leadership perspectives beginning with a historical overview. The philosophical perspective added depth to the discussion and established the topic as a social human dilemma encompassing time, place, and origin. The remaining two perspectives addressed the latent and current issues in the field focusing this part of the literature review within an organizational context.
Historical Overview

Workplace spirituality is a nascent area of research in the management literature. Prior to 1980 the number of references in the workplace spirituality literature is scant. Neal and Vallejo (in press) reviewed the bibliography available at the International Center for Spirit at Work and found 2 references in the 1960’s, 8 references in the 1970’s, 40 references in the 1980’s, 533 references in the 1990’s, and 134 references for 2000-2006. From 1960 to 1980 the focus of this literature was mostly religion as it applied to the work environment; “anecdotal and conceptual rather than empirical” (Neal, 2005, p. 10).

Neal (2005) has attributed this increase to five major trends: a change in the psychological contract between employees and employers, the changing demographics pointing to an aging baby boomer generation, the turning of the new millennium, a growth in personal growth and self-help groups, and the effects of terrorism. Other significant trends have been: technology and its limitations, stakeholder capitalism and corporate social responsibility, feminism, the green environmental movement, financial scandals that question business ethics, terrorism, and the increase in oil prices, mixed with triumphant capitalism and globalization (Howard and Welbourne, 2004).

Early religious anecdotal references appeared in 1994, in a special issue of the Journal of Organizational Change Management. The articles ranged from Shamanic perspectives to mystical traditions in organizational change and development (Neal, 2005). In 1999, a special issue of Chinmaya Management Review also published articles with similar topics (Neal, 2005). Up to this point in time, Trott’s (1996) study on spiritual well-being was the only empirical research in the literature. According to Neal (2005), it
was around this period that the first Doctoral students with topics in this area began to find means to publish their work. This early work contributed to identify and define key variables. For example, Freshman’s (1999) exploratory analysis of definitions and applications of spirituality in the workplace found the following key themes: diversity, learning and development, intuition, and personal aspects. Neal (2005) identified the work of Tischler, Biberman and McKeage (2002) and that of Kinjerski and Skrypnek (2004) important in recognizing two components of spirituality in the workplace that have supported other researchers in moving the field towards an empirical approach. The first was a humanistic component that emphasizes relationships and connection to other people in the workplace. The second was a transcendent component describing the connection with a higher power or authority.

*Philosophical Perspectives*

The areas of metaphysics, philosophy of religion, perennial philosophy and existentialism examine religious-spiritual phenomena and its relationship with human endeavors. Of concern to the current study are the existential perspectives, as they serve the purpose of establishing the spiritual dilemma faced by leaders as a social and human matter transcending time and culture. Existential philosophies cannot be framed under any single method or movement, but they all have in common a concern for the individual, personal responsibility, and are deeply concerned with the submission of the individual to larger forces (Asmus, 2006). Existentialism attempts to answer questions about human existence, in contrast to rational philosophy (Popkin & Stroll, 1993). Some existential philosophers like Søren Kierkegaard, Paul Tillich, Martin Buber, Karl Barth, and Gabriel Marcel address existentialism from a religious-spiritual perspective while
others like Martin Heidegger, Jean-Paul Sartre, Friedrich Nietzsche, and Albert Camus opt for a secular one (Mautner, 2000).

The roots of existentialism can be traced to Kierkegaard for whom the key questions were not in the realm of knowing but on doing (Popkin & Stroll, 1993). In order to do, individuals are faced with the act of choosing between different alternatives (Scott-Kakures, Castagnetto, Benson, Taschek, & Hurley, 1993). There are three ways to approach choice in Kierkegaard’s philosophical view on existentialism: the aesthetic, the ethical, and the religious (Scott-Kakures et al., 1993). In the aesthetic mode choices are immediate consequences of desires without adhering to any standard or principles. Self-reflection is obviated by the dictates of the desires or the heart. For Kierkegaard, aesthetic choice represents no real choice, because choice reflects a level of commitment that presumes some level of self-awareness as related to values, principles, or ethics (Scott-Kakures et al., 1993). The leader is bound to choose between competing value-sets reflecting different individual and organizational beliefs. Some of these beliefs will be spiritually linked whereas others will reflect prior personal or work related experiences.

The ethical mode requires a set of standards by which individuals ascribe to. Standards are created from deeply held principles allowing individual’s to engage in self-criticism. The outcome of this process is awareness of selfhood but it does not imply correct choosing (Scott-Kakures et al., 1993). “It does not follow by any means that the chooser cannot in turn choose the evil in spite of the fact that he chose the good” (Scott-Kakures et al., 1993, p. 342). At the aesthetic and ethical modes of choosing the individual is unable to reach a certain level of commitment which can only come from faith and commitment to God that ultimately leads to the core of one’s self (Scott-
In the religious mode of choosing, the individual transcends the ethical level of choosing and recognizes that selecting a specific set of ethical principles is a process of reason that is ultimately self-justified. In the religious mode individuals must make a leap of faith into the uncertainty of God’s existence (Scott-Karkures et al., 1993). The uncertainty of the individual’s commitment to God is what makes faith, faith. As Kierkegaard has argued:

What matters is to find my purpose, to see what it really is that God wills that I shall do; the crucial thing is to find a truth that is truth for me, to find the idea for which I am willing to live and die. (Kierkegaard, 1843/1987, p. 361)

In Kierkegaard’s existentialism, choosing seems to be arbitrary, even though a person can have values and beliefs that make him/her choose one way, there are no reasons why other actions might have been chosen (Scott-Kakures et al., 1993). The arbitrary nature of choosing (there is no way to know which the best course of action is or what is the right belief) brings fear to people; fear which can only be resolved by faith and God. The task of choosing becomes all the more difficult because truth is subjective, making the search of the impartial disinterested seeker a mere fiction. Truth’s subjectivity, stems not only from its epistemological impossibility but because the conception of a human being as an impartial seeker of truth would require becoming a center-less and soulless creature (Scott-Kakures et al., 1993).

In answering the Socratic paradox raised in *Meno* regarding a priori knowledge, Kierkegaard sets forth the tenets of his philosophy by explaining knowledge as some miraculous transformation process, or moment of enlightenment, taking place on the
learner at some point in his/her existence (Popkin & Stroll, 1993). Prior to this enlightenment the person does not know anything, in Kierkegaard’s reasoning God must then be the source of enlightenment. Choosing the right alternative between many requires from the person to first be enlightened, otherwise the person might be choosing for the wrong reasons, as beliefs prior to enlightenment are filled with distortions (Popkin & Stroll, 1993). In answering the nature of what a human being is, Kierkegaard writes (as cited in Scott-Kakures et al., 1993), “Man is spirit. But what is spirit? Spirit is the self. But what is the self?...Man is a synthesis of the infinite and the finite of the temporal and the eternal...A synthesis is a relation between two factors. So regarded, man is not yet a self” (Scott-Kakures et al., 1993, p. 339). This is interpreted as meaning that for humans being self, choosing and doing, is a becoming, something to aspire for, an achievement.

Heidegger’s work on existentialism, which spans most of modernism and postmodernism, was based on the philosophical developments of Kierkegaard, Nietzsche, and Husserl (Popkin & Stroll, 1993). Like Kierkegaard, Heidegger also supports the view that human beings can never have the necessary knowledge about facts or what he called entities (Popkin & Stroll, 1993), whether physical or spiritual, abstract or concrete. Heidegger’s existential posture reflects the leader’s acceptance of his/her experiences as being instrumental in choosing between alternatives, spiritual or not. Heidegger’s main focus was centered on the nature of being, mostly the occurrence of being and what causes this occurrence. For Heidegger, being happens within the human experience (Sheehan, 2003): “In Heidegger’s work, ‘being’ never refers to a single and unchanging ‘something’ standing off by itself, but always indicates an entity’s current phenomenal status in correlation with a given human comportment, whether cognitive, practical,
aesthetic, or whatever‖ (Sheehan, 2003, p. 107).

The key concept in being is Dasein, a term used to express the type of existence humans have rather than a description of human beings themselves (Sheehan, 2003). By examining Dasein, individuals can begin the search for being (Popkin & Stroll, 1993). For Heidegger, human beings live in a world that is structured in different ways, thus, human beings do not create their own world but can understand it. What constitutes authentic existence is the result of human beings trapped in existence and the world they live in (Popkin & Stroll, 1993). The potentiality for human beings to live an authentic life lies in the honest examination of the distractions of ordinary life and recognizing the type of existence they have chosen. It is through this examination that human beings realize their frail human condition, that of life leading to death (Popkin & Stroll, 1993). But in this examination of death is where human beings realize the opportunity for authenticity—becoming aware of our finitude (Sheehan, 2003).

Through this examination “we can each establish for ourselves what is meaningful for us without an ultimate framework. . . I and everyone, Dasein, are free to act in time to make life meaningful in the face of death‖ (Popkin & Stroll, 1993, p. 311). Once this finitude is accepted, life’s temporality and destiny become the fundamental elements of one’s world. Guilt results once human beings realize the result of what could or should have been created (Sheehan, 2003). Our creations become our objective role in life that gets manifested through language. For Heidegger, being a person is being a speaker that can negate or affirm its existence because of its ability to be the speaker of that existence (Vedder, 2005). It is through the acceptance of the finitude in our lives, the realization of our mortality that Heidegger suggests we define our authentic reality and
review the interpretations we make about ourselves, society and the world. Heidegger sees human beings as totally responsible for making the choices about what is true and real without caring for the rightness or goodness of the choice, they are only human choices (Sheehan, 2003).

Webster (2004) developed an existential framework of spirituality based on certain aspects of Heidegger’s and Kierkegaard’s theories like subjectivity, authenticity, angst, crisis, death and freedom. Webster suffices to say that these aspects have “a bearing on how the individual comes to understand the meaning and purpose of his existence” (Webster, 2004, p. 9.), which are the central tenets of spirituality. In Webster’s framework, subjectivity is viewed within the context of spiritual development, whereas such pursuit is not so much geared toward the understanding of the existence of things in an objective manner, but an understanding on how the individual relates to them. The object of existential spirituality is to focus on the relation of personal meaning to spiritual frameworks. In this framework individuals do not have to live in the “dichotomy between objective cosmological world-views and subjective personal meaning, [hence] an existential model of spirituality is able to present a view that is not tied to religiosity” (Webster, 2004, p. 13).

Workplace and Leadership Approaches

Trott’s (1997) descriptive correlational study of spirituality in the workplace related to the well-being of workers. Data from 184 workers at a Fortune 100 engineering-construction organization revealed moderately high levels of spiritual well-being. Pearson’s correlation coefficient demonstrated positive statistically significant relationships between spiritual well-being and the variables of organizational openness,
general self-efficacy, and affective and normative organizational commitment. The study revealed a weak relationship between spiritual well-being and continuance commitment. Analysis of interview transcripts confirmed the theory of spiritual well-being when workers expressed a sense of meaningfulness, purpose, and connection. The study also revealed that existential orientation was the primary contributor of spiritual well-being.

Beazley’s (1998) study into the meaning and measurement of spirituality in organizations provided the first instrument, the Spirituality Assessment Scale. The study made operational a definition of spirituality consisting of a definitive dimension and three correlated dimensions: honesty, humility, and service to others. The data obtained from 332 graduate students with prior work experience supported the dimensions of spirituality in the scale. Students who scored highly on the definitive dimension also scored highly on the correlated dimensions. These results were statistically significant from those students that had low scores on the definitive dimension. In Beazley’s Spiritual Assessment Scale, transcendence is measured by questions relating to spiritual practices (e.g., I believe that spiritual guidance is available through prayer and meditation) and prayer (e.g., Before making an important decision, I normally pray or meditate).

In an empirical study of 132 human resource executives and managers, Mitroff and Denton (1999) reported on the vast difference that existed between religious and spiritual views. Although some of the individuals in the study viewed spirituality as a proper subject of discussion, in general they viewed religion as not necessarily pertaining to the work environment. Mitroff and Denton (1999) also found that most of those interviewed wished to express their spirituality at work but were hesitant to do so by the lack of systems or role models. They also found that individuals were able to define
Mitroff and Denton (1999) found four different personal orientations towards spirituality and religion, measured as positive or negative views about them. The first orientation is the individual who sees religion and spirituality as positive, providing for basic beliefs or universal values. In this orientation, spirituality is experienced and developed through religious practice. The second orientation is the individual who sees religion as positive and spirituality as negative. This individual channels all its energy in the practice and dogmas of a particular religion. Being part of a religious community is of most importance for this person. Religion alone is the main source of beliefs and values.

The third orientation is the individual who has negative views about religion but a positive view about spirituality. Individuals in this area see religion as organized, closed-minded, and intolerant while attributing opposite views about spirituality. Individuals with this orientation see spirituality as individualized and accessible to all, regardless of belief system. They also see spirituality as an integrating force. The fourth orientation is the individual who sees religion and spirituality as negative. Individuals with this orientation see values as the driving force for proper behavior and organizational performance.

Mitroff and Denton (1999) also found five different orientations in which organizations could be religious or spiritual, although they recognize that this is not the
only model for workplace spirituality. The *religious-based organization* can be typified as either having positive views about religion and negative views about spirituality or positive views about both. *Spirituality-based organizations*, those with a positive view about spirituality but a negative view about religion, are further subdivided into *evolutionary, recovering, and socially* responsible organizations based on the leader’s beliefs or experiences. Evolutionary organizations begin with a religious base but evolve into a more ecumenical position. Recovering organizations adopt the principles of Alcoholics Anonymous as a means to spiritual development. This usually happens as a result of upper level management being involved in the use of drugs, alcohol, or gambling. Socially responsible organizations are managed by leaders who are guided by strong spiritual principles or values. These leaders apply their personal values unto the organization for the betterment of society, sometimes at the expense of their own employees. *Values-based organizations* are associated with strong philosophical principles or values emanating from the leader and do not necessarily ascribe to spiritual or religious values.

Ashmos and Duchon (2000) developed a definition and conceptualization of spirituality at work from the literature and created a measurement instrument that was given to 696 persons in four hospital systems in four cities in the United States. Their definition of spirituality from the literature can be stated as follows: “recognition of an inner life that nourishes and is nourished by meaningful work that takes place in the context of community” (p. 139). Their work extended to understanding the relationship between inner life, meaningful work, and community—the dimensions of the construct, to organizational performance.
The survey instrument addressed the participants’ attitudes at three different levels: attitudes about the participants’ self-view and their immediate work environment (Part 1), attitudes about their work unit functions (Part 2), and attitudes about their work organization as a whole (Part 3) (Ashmos & Duchon, 2000). Data from the survey was analyzed by “factor analyses using the maximum likelihood extraction method with a varimax rotation” (p.138). Part 1 reflected seven factors with eigenvalues greater than 1.0 accounting for 58.6 percent of the variance, namely: conditions for community, meaning at work, inner life, blocks to spirituality, personal responsibility, positive connections with other individuals, and contemplation. Part 2 reflected two factors with eigenvalues greater than 1.0 and accounting for 60.1 percent of the variance, namely: work unit community, and positive work unit values. Part 3 reflected two factors with eigenvalues greater than 1.0 accounting for 60.8 percent of the variance, namely: organizational values, and individual and the organization. In their conclusion Ashmos and Duchon (2000) admitted that the study did not address performance issues but it empirically established the dimensions for a spirituality-at-work construct necessary for scientific inquiry.

Milliman, Czaplewski, and Ferguson’s (2003) exploratory empirical research used some of the workplace spirituality measures in Ashmos and Duchon’s (2000) study to test a series of hypothesis focused on understanding the relationship between three workplace spirituality dimensions and five employee attitude outcome variables. Structural equation analysis was used. The workplace spirituality dimensions were meaningful work, sense of community, and alignment of values. The employee attitude outcome variables were organization commitment, intention to quit, intrinsic work
satisfaction, job involvement, and organization-based self-esteem. Three hypotheses were tested for each outcome variable for a total of 15 hypotheses. The sample population was 208 part-time, evening MBA students attending a business school in the southwest USA (Milliman et al., 2003).

The study showed strong reliability using Cronbach’s alpha with coefficients ranging from .82 to .94. Although not every one of the 15 hypotheses was supported, aggregate analysis of each outcome variable showed support of hypothesized relationship between the workplace spirituality dimensions and the outcome variables (Milliman et al., 2003). The structural equation analysis indicated that meaningful work was significantly related to four of the outcome variables, the exception being intention to quit. Sense of community was significantly related to all five outcomes, and alignment with organizational values was significantly related to organization commitment and intention to quit (Milliman et al., 2003).

Ashar and Lane-Maher (2004) used a focus group study and compared its findings with Mitroff and Denton’s (1999) study. They developed their own definition of spirituality based on the three typological definitions suggested by Schmidt-Wilk, Heaton, and Steingard (as cited in Ashar & Lane-Maher, 2004). For Ashar and Lane-Maher spirituality is defined as follows:

an innate and universal search for transcendent meaning in one’s life . . . it can be expressed in various ways, . . . involves some common behavioral components,. . .it involves a desire to do purposeful work that serves others and to be part of a principled community. It involves a yearning for connectedness and wholeness that can only be manifested when one is allowed to integrate his or her inner life with
one’s professional role in the service of a greater good. (p. 253)

Ashar and Lane-Maher (2004) studied the perceived qualities of success of 49 mid- and senior-level law enforcement executives in 1995 that had spent 20 to 25 years in the organization. The group was divided in two: one all-male group of 31 men, and one all-female group of 18 women, on the premise that gender difference would impact their view of success. Results from the analysis of the data revealed 40 different definitions for success, which were grouped into four main components of success: “a sense of accomplishment, balance, contribution to society, and contribution to coworkers” (p. 255). These four components became a two-dimensional model for success. One dimension related to the focus of success—between self and others, and the other dimension to context of success—that which occurred at work or non-work environments.

This model leads to four distinct possibilities: self-work, leading to a sense of accomplishment; self-non-work, leading to a sense of balance; others-work, leading to contribution to colleagues; others-non-work, leading to contribution to society (Ashar & Lane-Maher, 2004). Unexpectedly the study revealed that contrary to Ashar and Lane-Maher’s (2004) expectation, the participants of the study conveyed the same message of success, a view of success going beyond one’s self-interest, involving a contribution to something larger than personal egos, of caring for others and connectedness. Ashar and Lane-Maher (2004) concluded that this definition of success was similar to the definition of spirituality portrayed by participants in Mitroff and Denton’s (1999) study. They close their arguments suggesting a link between the two concepts and suggesting a relationship between people’s desire for success and their yearning to express their spirituality.
Fairholm (2004) performed a content analysis of the leadership perspectives model derived from the theory of leadership perspectives. The content analysis was conducted on 103 essays and 31 interviews of public managers. The purpose of the study was to validate the model’s construct. The leadership perspectives model postulates that leadership moves from lower-order to higher-order roles. Fairholm’s leadership continuum is based on five leadership perspectives, namely: scientific management, excellence management, values leadership, trust cultural leadership, and whole soul leadership. Each leadership perspective is driven by three operational categories: implementation description, tools and behaviors, and approaches to followers. For each category Fairholm lists a series of behaviors and actions—leadership elements, that are reflected at each successive leadership perspective.

Results from the study suggest that leadership perspectives tend towards a hierarchical order, thus supporting the original assumption of the model. Leaders moving up the hierarchy would transcend and even sublimate actual tools and behaviors in favor of a higher-order perspective of tools and behaviors. Fairholm (2004) also found supporting data for the establishment of operational categories specifying leadership activities. Out of the 103 essays, there were 1,343 distinct references to the leadership elements. The data also reflected gender and racial congruence, that is, the leadership perspective model applied regardless of the gender or race of the leader.

Marques et al. (2005) developed a model for workplace spirituality anchored in the interaction of internal, external, and integrated factors. The basis of the model was an extensive review of the literature and statements gathered from six business executives. The result was a list of 19 themes used to develop a definition of workplace spirituality
that included the three factors. A schematic representation of the definition became the workplace spirituality model.

In the workplace spirituality model developed by Marques et al. (2005), the personal values of honesty, creativeness, proactivity, kindness, dependability, confidence, and courage bring the individual to interconnect with its work environment. This interconnection between the environment and other workers with similar values create an aesthetically motivated environment consisting of qualities like sense of purpose, acceptance, peace, trust, care, encouragement, and achievement among others. This working environment leads to enhanced team performance and harmony, which supports the organization in becoming an industry leader exuding fairness, cooperativeness, vision, responsibility, charity, creativeness, high productivity, and accomplishment. Marques et al. posit that in this type of organization employees will feel increased job satisfaction and self esteem, which in turn nurture the set of personal values, thus closing the loop in the model and creating a continuous positive cycle. Based on the responses from all of the participants in the study, Marques et al. conclude that establishing and sustaining a spiritual workplace requires appropriate leader’s behavior and interconnectedness among workers.

Kelemen and Peltonen (2005) categorized workplace spirituality into normative, descriptive, and critical approaches. Normative approaches are either religious or secular. Secular views focus on the values, ethical codes, and belief systems espoused in the organization. Spirituality is seen as a latent force that can be channeled towards organizational objectives. The religious approach focuses on the element of religious community, as determined by specific religious practices, to determine the appropriate
moral conduct and general well-being on the organization (Kelemen & Peltonen, 2005). Descriptive approaches emphasize specific manifestations of spirituality in organizations can be quantitative or qualitative in nature and encompass a wide-range of spiritually related topics (Kelemen & Peltonen, 2005). Critical approaches examine the consequences of spirituality in the workplace to organizational outcomes or organizational normative and formative areas.

In a longitudinal study Fry et al. (2005) used structural equation modeling techniques to test and validate the causal spiritual leadership model. Fry (2003) defines spiritual leadership as “comprising the values, attitudes, and behaviors that are necessary to intrinsically motivate one’s self and others so that they can have a sense of spiritual survival through calling and membership” (pp. 694-694). It incorporates vision, hope/faith, and altruistic love, theories of workplace spirituality, and spiritual survival/well-being (Fry, 2003). Spiritual survival/well-being of leaders and followers derives through calling and membership—when organizational members make a difference, have a sense of meaning through work, and feel understood and appreciated (Fry et al., 2005). At the most basic level, spiritual leadership uses the values, attitudes, and behaviors of the leader to foster the follower’s needs for survival which in turn produce desired organizational outcomes. The leader’s values, attitudes, and behaviors are reflected in the shared vision of the organization and its defining qualities and the defining qualities of the hope/faith and altruistic love elements of the model.

The effect of spiritual leadership is to transform the business into a learning organization by creating value congruence across the organization’s strategy, the team, and the individual. As posited by Fry (2003), this learning environment will yield
improved organizational outcomes such as, commitment, productivity, and employee well-being. Fry also posited that spiritual leadership theory includes major theories of leadership like transformational, charismatic, servant, authentic, and path-goal, and that the spiritual leadership construct was conceptually distinct, parsimonious, and less confounded than other leadership models.

The sample population for the first survey was 200 individuals, for the second survey it was 189 individuals, all belonging to the Apache Longbow helicopter attack squadron of Army soldiers at Ft. Hood Texas. Goodness of fit was established with the normed fit index (.959), incremental fit index (.971), and the comparative fit index (.971). Values greater than .90 are considered acceptable, thus establishing empirical support for the fit between the model and the data collected (Fry et al., 2005). Except for the calling-organizational commitment path, all other relationships showed all standardized path coefficients were positive and significant (Fry et al., 2005).

Relevance of Workplace Spirituality

Existential views from Kierkegaard and Heidegger explain some of the internal forces faced by leaders in using spiritual values as part of the organizational culture not explicitly explained by motivation or expectancy value theories. They provide a deeper perspective on the intention of the leader, an independent variable in this correlational study, to commit to a specific course of action. It also explains the process of bringing values; a series of abstractions in the leader’s mind, into a set a concrete realities that can be turned into principles for commitment and action. Through this process, the creation and choice among competing values gets transferred to a preconscious state of mind and automatic response.
To choose spiritual values over other sets of competing values to drive organizational performance, in Kierkegaard’s view, requires a process of choosing on a rational or ethical basis and will not lead to high levels of commitment. Only in the spiritual-religious mode of choosing can leaders truly commit. In Heidegger’s view, it is the leader who, through self-examination of her/his existence, can create the necessary conditions to carry out this role. Webster (2004) integrates both views into a framework of existential spirituality rid of the dichotomy between the leader’s cosmological view and her/his objects of meaning, creating the context for a worldview not tied to religiosity. These existential perspectives allow for secular paradigms of spirituality to emerge, leading to diverse constructs of workplace spirituality. The existential philosophical view is also important as it explains a rational for the leader’s action.

The research of Mitroff and Denton (1999) represented the first empirical study to understand workplace spirituality revealing that most people were eager to express their spirituality at work but did not have the systems or role models. Other studies (e.g., Ashmos & Duchon, 2000; Fry et al., 2005; Milliman et al., 2003) led to the development of instruments to measure different aspects of spirituality at work and their relationship with employee and organizational related outcomes. Fairholm (2004) presented a leadership continuum model supporting a hierarchical order of evolution for leaders from scientific management to whole soul leadership.

This part of the literature review supports the current study in establishing the role and actions of the leader as an important variable mediating between organizational values and organizational performance at the philosophical, theoretical, and empirical levels. It also reflects the importance of value congruence between the leader and the
organization. Of practical utility to the current study is the spiritual leadership model (Fry, 2003) that links the leader’s attitudes, values, and behaviors to organizational outcomes. Fry’s model provides the theoretical and empirical support positioning the current study’s dependant variable as a legitimate research topic.

Values

Values are useful and serve as guiding principles in people’s lives (Schwartz, 1999). They drive behavior (Rokeach, 1979), including workplace behavior (Schwartz, 1999). The link between organizational values, leadership, and performance is well documented in the literature. Much of the focus on values research has been geared towards understanding how individuals, groups, organizations, and cultures differ in the values they hold, and how these values impact behavior (Abbott, White, & Charles, 2005). Values are important within the personal and organizational domain. In the organizational domain they are part of the organizational culture and are seen as a way to operationalize it (Scott, 2003).

Personal and Cultural Values

The interest in values began with studies of personal values but has been expanded to include values at the organizational level (Fitzgerald & Desjardins, 2004). Rokeach (1979), who developed value theory, posited that the ultimate purpose of our values, attitudes, beliefs, and behaviors is to maintain and develop our sense of self-worth. Value theory explores the relationship among these factors. Beliefs define a situation as good or bad. Actions toward the belief can be categorized as desirable or undesirable. Rokeach advances that humans have 36 dominant beliefs representing 18 instrumental and 18 terminal values. Terminal values are end-states of existence; while
instrumental values are preferred modes of behavior. Terminal values can be further
categorized as into social or personal values, and instrumental values into morality-based
and competency-based values (Hood, 2003). Social values include qualities such as
freedom, equality, and peace. Personal values include qualities such as self-respect,
broadmindedness, and courage. Morality-based values include qualities such as
politeness, helpfulness, affection, and forgiveness. Competency-based values include
qualities such as logic and competence. Value theory is based on the following
assumptions: (a) people have relatively few values, (b) humans possess the same number
of values, but to different degrees, (c) values form value-systems, (d) values are rooted in
culture, society, and institutions, and (e) values are manifest in messages and, therefore,
are able to be examined (Aust, 2004).

Schwartz and Bilsky (1987) review of the literature identified the following
common features of values: (a) they derive from concepts or beliefs, (b) are perceived as
desirable end states or behaviors, (c) are transcendent over specific situations, (d) serve as
guides for selection or evaluation of behavior and events, and (e) are commonly ordered
by importance. The desirable end states described by Schwartz and Bilsky (1987) are
akin to Rokeach’s (1979) terminal and instrumental values. Schwartz and Bilsky (1987)
theorized values as cognitive representations of three types of universal human
requirements: biological needs of the individual, social interactional requirements for
interpersonal coordination, and social institutional demands for group welfare and
survival.

**Organizational Values**

Organizational values are espoused by senior managers. These values often reflect
organizational practices and the manager’s views on how they perceive the organization, how they would like their organizations to be, or how they would like for stakeholders to perceive the organization (Fitzgerald & Desjardins, 2004). Organizational values are shared beliefs about what the organization stands for, has deep meaning for its constituents, and guides behavior (Nahm et al., 2004).

England (1967) developed a unique taxonomy on the values of American managers using a business community panel to narrow down 200 concepts derived from the literature of the time to 66. These 66 concepts were organized into five categories: goals of business organizations, personal goals of individuals, groups of people, ideas associated with people, and ideas about general topics. England’s taxonomy has been criticized by McDonald and Gandz (1991) as lacking methodological rigor, in the sense that it was not empirically derived. Some of the arguments were: that some items were values (e.g., individuality, loyalty, equality) while others were not (e.g., money, labor, union, skills), that the final structure of values contained overlapping concepts, and that validation of the value-set was predominantly done at the level of national cultures not organizations.

Posner, Kouzes, and Schmidt’s (1985) work on value congruence (the relationship between personal and organizational values) involved 1498 participants’ nationwide across different managerial positions and industries. The results from the data analysis categorized value congruence as low, moderate, and high. Each category had approximately the same number of respondents. Posner et al., concluded that shared values relate to organizational and personal factors such as: feelings of personal success, organizational commitment, self-confidence in understanding personal and organizational
values, ethical behavior, feelings of job and personal stress, organizational goals, and organizational stakeholders.

Hofstede, Neuijen, Ohayv, and Sanders (1990) mix study assessed organizational culture in 10 different organizations; five in Denmark and five in the Netherlands. The study aimed at finding differences in organizational culture. The model, derived from a survey of the literature and the researchers’ own ideas, consisted of four categories: symbols, heroes, rituals, and values. Symbols are the objects of culture like words, gestures, and pictures that carry a particular meaning. Heroes are persons (dead, alive, or imaginary) that serve as role models for behavior. Rituals are collective activities highly important to the social integrity of the group. Values, the core of culture, are broad non-specific feelings of good and evil, beautiful and ugly, normal and abnormal—unconscious feelings that are seldom discussed in public, difficult to observe but are manifested in alternatives to behavior (Hofstede et al., 1990). Symbols, heroes, and rituals are subsumed under the term practices. These manifestations of culture are visible to an outside observer but their meaning is embedded in the organizational actors.

Factor analysis revealed three factors for values and six factors for practices (Hofstede et al., 1990). After eliminating for country effects, the three values factors for values were: work orientation (intrinsic vs. extrinsic), identification (company vs. non-company interests), and ambition (concerns with money and career vs. family and cooperation). The six practice factors were: process-oriented versus results-oriented, employee-oriented versus job-oriented, parochial versus professional, open system versus closed system, loose control versus tight control, and normative versus pragmatic.

Hofstede et al. (1990) concluded that daily practices are at the core of an
organization’s culture, albeit beliefs in the popular literature that shared values represent the core of corporate culture. They also concluded that demographic criteria such as nationality, age, and education accounted for more differences in employee values than membership to the organization. The founders’ and leaders’ values shape organizational culture but they affect ordinary members of the organization through shared practices. Thus, values enter the organization via the hiring process—“a company hires people of a certain nationality, age, education, and sex and, therefore, with certain values. Their subsequent socialization in the organization is a matter of learning practices: symbols, heroes, and rituals” (p. 312).

McDonald and Gandz (1991) content analysis resulted in 358 items aggregated into 21 value dimensions. Data was gathered from 45 in-depth interviews with senior managers, consultants, executive recruiters, and employees in 32 different organizations across diverse industries. Cooperation, diligence, moral integrity, and openness were the most salient value dimensions of the study. The values of autonomy, obedience, and orderliness were subsequently added to the original dimensions. McDonald and Gandz (1991) found conceptual similarities in 22 of the 24 values when comparing them to the value dimensions of Allport, Vernon and Lindzey (1960), England (1967), and Rokeach’s (1979), thus claiming validity for their dimension set.

Schein (1992) suggested the examination of organizational culture at three levels: artifacts, which are visible organizational structures and processes; espoused values, which are reflected on the organization’s philosophies, strategies, and goals; basic underlying assumptions, which are unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings. For Schein (1992), basic underlying assumptions lead directly to
values and action. There is a process of transformation by which someone’s original values get changed to basic underlying assumptions. The process can also be described as a cognitive transformation where the espoused value changes into a shared value or belief and ultimately into a shared assumption. For this transformation process to take place the espoused value must be effective in solving the organization’s problems or in sustaining its systems (Schein, 1992). A high level of congruency between espoused values and underlying assumptions can yield an operational philosophy which can support in bringing cohesiveness to the group, a sense of identity, and support the forming of a core mission (Schein, 1992).

Schwartz’s (1999) theory of cultural values identified seven types of values structured along three polar dimensions: Conservatism versus Intellectual and Affective Autonomy; Hierarchy versus Egalitarianism; and Mastery versus Harmony. The theory was derived from over 35,000 respondents from 122 samples in 49 nations, and considered by Schwartz an expansion on the limited aspects of other cultural theories on value with implications to the work environment. The seven values were derived from three universal issues confronting all societies: the definition of the nature of the relationship between the individual and the group, the need for all societies to guarantee responsible behavior which preserves the social fabric, and the relationship of humankind to the natural and social world (Schwartz, 1999).

The validity of the theoretical content and structure-level value types was tested between 1988 and 1993 using a similarity structure analysis (SSA). The data was used to compare national cultures and derive some implications of cultural values for three aspects of work: work centrality, societal norms about work, and work goals (Schwartz,
Schwartz (1999) defined work centrality as the importance and significance of work in a person’s life. Work centrality tends to be more evident in societies where Mastery and Hierarchy values are important. Societal norms was defined as the self-perception on work, that is, work seen as a right of the individual versus work as duty or obligation. According to Schwartz societies will define work more as an entitlement where Egalitarianism and Intellectual Autonomy values are important. Work goals were defined as rewards people seek in work and categorized as power, intrinsic, extrinsic, and social value dimensions. Schwartz (1999) concludes that power values are more important in societies where Hierarchy and Mastery values are emphasized. Intrinsic work values are more emphasized in societies that pursue Autonomy values, while extrinsic work values are more emphasized with Conservatism and Hierarchy culture values but conflicting with Intellectual Autonomy values.

Aust’s (2004) longitudinal case study analysis derived a unique value structure for the United Church of God (UCG) reflecting its organizational identity. Rockeach’s (1979) value survey was used in determining UCG’s values. Content analysis of 195 documents over the first five years of UCG’s existence resulted in 2713 value terms, relating aspects of organizational identity to proper communication of organizational values. Findings from the case study suggested a unique value structure for UCG that evolved during the time of the study. The first year family, security, obedience, mature love, helpfulness, and ambition values predominated. During the third year family security, helpfulness, ambition, obedience, and true friendship values predominated. And during the fifth year family security, ambition, helpfulness, obedience, and wisdom

Sağnak’s (2005) descriptive research revealed value congruence between the personal values of teachers/principals and those of the school system. The entire population of 32 primary schools in Erzincan, Turkey, comprised of 66 principals and 541 teachers, participated in the study. McDonald and Gandz (1991) used 24 value dimensions was used and congruence was found across 22 of the value dimensions among teachers and principals personal values and those of the school system. Value congruence was found in the following dimensions: creativity, adaptability, cautiousness, social equality, autonomy, courtesy, humor, logic, aggressiveness, forgiveness, moral integrity, fairness, openness, and broad-mindedness, among others. Incongruence was found in cooperation, economy, formality and obedience.

Nazir’s (2005) correlational study on six banks from India explored the compatibility between cultural values, individual preferences, and the role of socialization with respects to value congruence. Another objective of the study was to explore the relationship between value congruence and employee commitment. Findings from 204 participants revealed the following: (a) half of the banks sampled scored moderate to strong person-culture fit, the other half showed weak to moderate person-culture fit, (b) half of the banks sampled scored high to moderate on socialization practices, the other half scored low on socialization practices, (c) those banks with high value congruency and socialization scores showed significant correlation between person-culture fit and normative commitment, and (d) banks with low value congruency
and socialization scores showed low correlation between person-culture fit, normative and instrumental commitment.

Abbott et al. (2005) conducted two studies in two different organizations in Australia to confirm and clarify the relationship between values and components of organizational commitment. The purpose of the first study was to investigate the relationship between perceived organizational values and components of organizational commitment. The purpose of the second study was to test the effect of perceived organizational values on turnover intention—a key measure of an employee’s level of commitment. Results from the first study demonstrated that employees build affective and normative organizational commitment by connecting their personal values with those of the organization (Abbott et al., 2005). This effect is more likely when the organization’s values reflect pro social values such as vision and humanity. Results from the second study demonstrated that regardless of the value structure of an external organization, organizational commitment acted as a buffer against interest in external employment (Abott et al., 2005).

Muratbekova-Touron (2005) examined the impact of the introduction of a competency-based leadership model on the organizational culture and its values. Muratbekova-Touron concluded that large organizational changes needed not to be accompanied by a change in values. An organization could maintain its core values and still develop a different culture in the adoption of culture changing projects.

Values, Leadership, and Performance

Research has shown that high-performing organizations differ in organizational values regardless of the performance measures looked at (Hultman, 2005). According to
Roberts and Hirsch (2005) organizational culture and its operational variable, values, are
determinant and essential factors in labor productivity, at par with capital stock,
technological change, and human capital. “Cultural factors related to workplace
spirituality have been shown to override the economic-political environment as an
influence on worker productivity, ethics, values, exercise of authority, innovation, etc”
(Jurkiewicz & Giacalone, 2004, p. 130). Several books based on empirical derived data
have addressed the values-performance link.

Kotter and Heskett (1992) found that revenues increased by an average of 682% over an 11 year period for companies with values that reflected the legitimate interests of employees, customers, and stockholders, and that encouraged leadership at all levels within the organization.

Collins and Porras (1997) examined 18 visionary companies and found that when compared to others, these visionary companies had a rock-solid core ideology that remained steady over time. They espouse a series of organizational values such as: honesty, integrity, learning, creativity, and personal competence. Collins and Porras (1997) concluded that superior market performance is not directly related to profits and that leaders should be concerned for the organization and its people.

De Geus (1997) found, in a study of 27 companies larger and older than Royal Dutch/Shell, that their ability to survive in the long run did not depend solely on return on investments to its shareholders, rather on optimizing its people resources. For De Geus, profitability was not a predicate of corporate health but a symptom. Some organizational values espoused by De Geus include: personal competence, fairness, honesty, learning, tolerance, and trust.
Fitz-Enz (1997) longitudinal values study of 50 companies found that specific value sets contributed to the organization’s overall performance. Some of the values were: personal integrity, collaboration, partnering with stakeholders, extensive two-way communications, and a balance between human and financial values. Quantitative and financial performance criteria were used to measure performance.

Kouzes and Posner (2002) leadership practices inventory has been used in four continents since 1987 with over 20,000 participants. Results have led to the development of a leadership model based on five practices and 10 commitments. Kouzes and Posner (2002) believe this model allows leaders to improve organizational performance and take advantage of the opportunities created by a new world order. The five practices are: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart.

These practices are supported by 10 specific behaviors (two behaviors per practice), which frame leadership as a relationship. Some of the leadership behaviors include: setting an example by aligning actions and shared values, engaging others in a common vision by appealing to shared aspirations, experimenting and taking risks, fostering small wins and learning, strengthening others by sharing power and discretion, and celebrating values and victories by creating a spirit of community. These behaviors are necessary to deal with a new leadership context filled with heightened uncertainty, a sense of connection enhanced by technological advancements, a belief that people come first, a global economy where social capital is relevant, speed, and an intense search for meaning (Kouzes & Posner, 2002). According to Kouzes and Posner (2002) the search for meaning is closely related to spiritual matters and “whether you call it spirituality,
religion, faith, or soul, there’s clearly a trend towards greater openness to the spiritual side within the walls of business” (p. xxii).

Panda and Gupta’s (2003) case study of an Indo-American joint venture explored the prevailing organizational culture to find out how the employees identify with the espoused organizational mission. Findings revealed that employees’ emotional commitment develops when there is value congruence between the espoused organizational values and the desired organizational values of the employees. Also, the organizational values and practices modeled by top management should match the sociocultural values of the society in which the organization is located. Panda and Gupta (2003) concluded that eliciting emotional commitment for the espoused mission required organization should do the following: (a) involve all stakeholders in the mission creating process, (b) develop a highly cohesive top management team that live the espoused organizational values, and (c) foster top management credibility—have them do what they say.

Hood (2003) studied the relationship between leadership style, CEO values, and ethical practices. A total of 382 CEO’s constituted the sample, mostly from small to medium size high-technology firms throughout the United States. Hood used Rokeach’s (1979) value set and the Multifactor Leadership Questionnaire (Bass & Avolio, 1995) to assess the CEO’s leadership style and their corresponding values. Factor analysis of fourteen values resulted in four factors with eigenvalues greater than 1.0 accounting for 57 percent of the variance as follows: morality-based values (forgiveness, politeness, helpfulness, affection, and responsibility), social values (freedom, equality, and world peace), personal values (honesty, self-respect, courage, and broadmindedness), and
competency-based values (logic and competence). Hood’s (2003) findings revealed the importance of the ethical orientation of the CEO in understanding ethical practices in organizations. Social and morality-based values were positively correlated to ethical practices of formal ethical statements and to diversity training. CEO’s who perceived themselves as transformational rated all factors of values very highly. After controlling for company size and CEO values, transformational leadership was positively related to formal statement of ethics.

Fitzgerald and Desjardins (2004) comparative examined how two departments within a health care organization aligned with organizational values. A total of 74 participants returned the questionnaires. One department defined and communicated the organization’s values/behaviors, and the other that did not. The study specifically looked at the impact of the communicated and defined behaviors supporting the organization’s nine values to the following variables: employee satisfaction, turnover rate, absenteeism, employee morale, and involvement in decision making. Results demonstrated no significant difference between departments in all but two of the tested hypotheses. A significant difference was found in organizational involvement and perception of participation in decision making for the department that had defined and communicated organizational values (Fitzgerald & Desjardins, 2004).

Jurkiewicz and Giacalone (2004) developed a values framework for measuring the impact of workplace spirituality in organizational performance. This framework is set as a set of values that would promote workplace spirituality. The values are set within a continuum with positive and negative consequences for workplace spirituality at each end of the continuum. For example, on the positive end of the continuum, integrity is defined
as “uncompromising adherence to a code of conduct; sincerity, honesty, candor; exercising unforced power” (p. 131). On the negative end of the continuum is defined as “organizational members act deceptive, expedient, artificial, shallow, politically manipulative, and inconsistent with following a code of conduct” (p. 131). The remaining values of the framework are: benevolence, generativity, humanism, justice, mutuality, receptivity, respect, responsibility, and trust. Jurkiewicz and Giacalone (2004) suggest further research in the following areas: establishing a measurement tool for workplace spirituality, further refinement in understanding the performance variables, and further investigation into mediating variables impacting performance.

Jaskyte’s (2004) exploratory study evaluated the relationship between transformational leadership, organizational innovativeness, and cultural consensus in nonprofit organizations. The sample for the study consisted of 247 employees in 19 nonprofit human service organizations. Kouzes and Posner’s (2002) leadership practices were used and evaluated against values such as stability, teamwork, detail orientation, and people orientation. Results showed a significant relationship between transformational leadership, cultural consensus, enabling others to act, modeling the way, encouraging the heart, and inspiring a shared vision. Other variables that were positively correlated were transformational leadership and team orientation, modeling the way, attention to detail, and encouraging the heart with team orientation, stability, and people orientation. There was no significant correlation between transformational leadership and organizational innovativeness.

Campbell’s (2004) longitudinal study examined the stability of organizational values in an educational environment. The study was conducted six years apart with 492
respondents at Time 1 and 322 at Time 2. Campbell (2004) used Hofstede et al (1990) measures of organizational culture. Content analysis of the data reflected that organizational values did not change significantly amidst sweeping changes in the organization’s top management over the time period of the study.

Relevance of Values

The interest in values began with studies of personal values but has been expanded to include values at the organizational level (Fitzgerald & Desjardins, 2004). Value theory (Rokeach, 1979) and its subsequent studies focused value research by uncovering that all individuals possess the same values but to a different degree, and that people have relatively few values. There are biological, interpersonal, and group welfare and survival needs that position values as an important requirement in human lives (Schwartz & Bilsky, 1978). Leaders are dealing with a new leadership context. This context is filled with heightened uncertainty, a sense of connection enhanced by technological advancements, a belief that people come first, a global economy, an economy where social capital is relevant, speed, and an intense search for meaning.

According to Roberts and Hirsch (2005), organizational culture and its operational variable, values, is a determinant and essential factor in labor productivity at par with capital stock, technological change, and human capital. At the organizational level values are shared beliefs about what the organization stands for, has deep meaning for its constituents, and guides behavior (Nah et al., 2004). They also tend to remain stable over time regardless of changes at the top management level (Campbell, 2004). Value congruence between personal and organizational values is at the crux of value research in organizations for its claimed effect on organizational outcomes like employee
and organizational commitment (Nazir, 2005). Albeit the remark on popular literature that shared values represents the core of a corporate culture, it is the daily practices that are at the core of an organization’s culture (Hofstede et al., 1990). The values that ultimately get manifested in the organization will be influenced by demographic criteria such as nationality, age, and education than membership to the organization (Hofstede et al., 1990).

This part of the literature review supports the current study in establishing the role of value congruence in organizational performance. Many of the spiritual values found in the literature correlate with those found in several of the studies presented here (e.g., trust, creativity, forgiveness, fairness, openness). The organizational leader is faced with the dilemma of expressing her/his spirituality values in the organization at the expense of being chastised or rejected because of the multiple connotations that spirituality values might evoke. This literature is relevant as it reflects a strong link between personal, organizational values, and organizational outcomes. Nevertheless, workplace spirituality values are besieged by theoretical and practical implications in their application. It is this dichotomy that provides fertile ground for the purpose of the current study.

Motivation

Given the broad spectrum of motivational theories and models, this section of the literature review will place more emphasis on those theories that predict human behavior as it is directly related to the purpose of the current study. The conundrum of theories that deal with motivation will be addressed lightly in order to provide perspective and depth to the literature review and gain a sense of historical perspective. This section will be divided into three parts. The first part explains the early theories comprising work
motivational aspects, the second part will address recent motivational theories focused on beliefs values and goals, the third part will discuss the theory of planned behavior—to be used as the foundation for the development of the methodology for the current study.

Needs Theory

The best well-known theories of motivation include Maslow’s hierarchy of needs, Herzberg’s two-factor theory, McGregor’s theory X and theory Y, and McClelland’s three-factor theory (Gambrel & Cianci, 2003). These theories were the precursors of today’s motivation and behavioral theories. Other motivational theories abound in the literature but these represent germinal thought that has influenced business management through time.

Maslow’s (1998) needs theory, first postulated in 1943, is often represented as five levels within a pyramid. The hierarchy of needs is based on two principles: (a) everyone starts at the bottom of the pyramid and moves up when the need at the higher level is not being fulfilled, and (b) a need is not activated until the one below it has been satisfied (Maslow, 1998). At the lowest level in the hierarchy are the physiological needs, these are the needs for biological maintenance—food, water, health, etc. Up one level are the safety needs. These are the needs for security, protections, and stability. Above safety needs are social needs. These are satisfied by love, affection, and a sense of belonging. Above social needs are esteem needs, which get satisfied by respect, prestige, and recognition. At the top of the hierarchy are self-actualization needs. These are associated with self-fulfillment, growth, creativity, and fully using one’s abilities (Maslow, 1998). Maslow defined it as follows:

Even if all these needs are satisfied, we may still often (if not always) expect that
new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for: A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualization. (p. 382)

Criticism of Maslow’s hierarchy of needs abound in the literature ranging from the lack of evidence that such hierarchy indeed exists, to changes in the hierarchy of levels according to culture (Gambrel & Cianci, 2003; Sultan, 2005). Others have criticized the overlap of needs. That is, the condition of satisfaction of one need as a prerequisite to escalate to the next level is not warranted (Sultan, 2005). At the societal and individual levels multiple needs can coexist simultaneously. Sultan cites the example of Nelson Mandela as a person who pursued his self-actualization needs with disregard for his security and belonging needs. Herzberg (1965) also recognized the fact that lower needs are never satisfied as a result of the continuous demands for physiological and sociological needs, the constant changes of societies, and the individual search for status symbols.

Herzberg’s (1965) motivation-hygiene theory, first reported in the book *The Motivation to Work*, postulates that job satisfaction and job dissatisfaction are distinct and separate constructs, not just the opposite ends of the same feeling. The population of the original study was limited to a group of engineers and accountants who represented an industry located in Pittsburgh, a city in the United States. Other studies were completed with populations represented by supervisors, scientists, female assemblers, hourly male technicians in diverse industries and working environments. The basic two-dimensional nature of job attitude was demonstrated in all these sample populations, except for the
lower level supervisors in a utility company and the women scientist.

Determinants of job dissatisfaction (hygiene factors) are linked to environmental conditions like company policies, administrative practices, supervision, interpersonal relations with supervisors, peers, and subordinates, working conditions, status, and salary. Determinants of job satisfaction (motivational factors) are linked to the relationship between the employee and its job task content. The most salient factors are achievement, interesting work, responsibility, professional growth, and advancement. According to Herzberg the hygiene factors do not contribute or have little effect on the employee’s sense of happiness and are not the proper nutrient for psychological growth. Motivational factors bring about the right attitude that is typically associated with work motivation. Herzberg clarifies this conclusion when he says, “You cannot love an engineer into creativity. The love might make him more comfortable, less hostile, but it is the challenge of the task that is the means for unleashing his talents” (p. 371).

McGregor first postulated theory X and theory Y regarding human behavior in his book The Human Side of Enterprise (Sultan, 2005). McGregor based his work on Maslow’s hierarchy of needs, grouping physiological and security needs into lower order needs, and belonging, esteem, and self-actualization into higher order needs. As with Maslow, McGregor believed that once a need is satisfied, another one takes its place, but clarifies that a satisfied need does not constitute a motivator of behavior (Sultan, 2005). Theory X assumes that people inherently dislike work. It requires the control of the individual worker or group by threat or disciplinary action. Theory X also postulates that the average person prefers to be directed and is not keen to take responsibility (Sultan, 2005). The main individual thrust is satisfying security needs.
Theory Y postulates that human beings seek to put effort towards work in a natural way and that control and punishment is not the only means to motivate workers (Sultan, 2005). Theory Y also assumes the following: a person will self-direct when committed to organizational objectives and finds the job satisfying, that under the proper conditions the average person will take responsibility, and that employees like to make decisions to solve problems using their imagination and creativity (Sultan, 2005). Choosing the right approach is circumstantial. When referring to theory Y and innovation McGregor (as cited in Sultan) said—“[it] requires first the acceptance of less limiting assumptions about the nature of the human resources… and second the readiness to adapt selectively to the implications contained in those new assumptions. Theory Y is an invitation to innovation” (p. 323). Sultan cautions against such strict categorization of workers, arguing that is best to find the best job-person fit. This approach avoids the Pygmalion effect where the manager’s perception of its employees elicits that specific type of behavior, a view held by McGregor.

In *The Achieving Society*, McClelland espouses a theory of economic growth based on psychological motivational factors (Crockett, 1962). The focus of McClelland’s theory is on the internal factors, values, and motives, specifically the need for achievement (*n* Achievement, or *n* Ach). The purpose was to explore the effect of a high concentration of *n* Ach people would have on a society (Crockett, 1962). McClelland gathered data from different time periods in history such as coal imports to London, the frequency of Greek potsherd remains in the Mediterranean basin, and from the medieval literature to pre-Inca funerary urns (Crockett, 1962). Analysis from the data supported the hypothesis that *n*-Ach or the need for achievement was a necessary precondition of
economic advancement (Crockett, 1962). The same study also suggested two important motivators: the need for power and the need for affiliation (Scott, 2005).

McClelland and Burnham (1976/2003) used these findings and applied them to management. They measured the morale scores of 50 managers on the basis that an index of a manager’s effectiveness would be the climate he or she created, which ultimately reflected in the subordinates’ morale. Their findings suggested three kinds of managers: institutional managers, affiliative managers, and personal-power managers. The 50 managers were evaluated with regards to power motivation, affiliation motivation, and inhibition. They concluded from the data that institutional managers, who are high in power motivation, low in affiliation motivation, and high in inhibition, were the most effective managers in creating an effective work climate.

*Expectancy-Value Theories*

In expectancy-value models of behavior, expectancy refers to beliefs about the individual’s self-perception in accomplishing tasks or activities, values refers to the incentives or reason for doing the task (Eccles & Wigfield, 2002). The field of expectancy-value theory is widespread and, according to Eccles and Wigfield (2002), can be categorized into the following areas: theories focused on expectancies for success, theories focused on task value, theories that integrate expectancies and values, and theories integrating motivation and cognition. This portion of the literature review will briefly discuss expectancy-value theories important that lead to the use of the theory of planned behavior as the theoretical construct driving the methodology of the current study.

Locus of control theories (e.g. Rotter, 1982) espouse that expectations for success
are directly related to the extent that one feels in control of successes and failures (Eccles & Wigfield, 2002), but theorists have broadened the scope of this conceptual framework. Skinner (as cited in Eccles & Wigfield, 2002) proposed an elaborate model of perceived control focused on goal-directed activities of children. Skinner defined three critical beliefs: means-end beliefs, agency beliefs, and control beliefs. Means-end beliefs deal with the expectation that particular causes can produce certain outcomes. Agency beliefs refer to the expectation that the individual has access to the means necessary to achieve the expected outcome. Control beliefs are the individual’s expectation that they produce the desired outcome. These set of beliefs have an effect on the achievement of goals (Eccles & Wigfield, 2002).

Vroom’s (1964/1995) expectancy theory has been used for improving job motivation by looking at the value employees give to social and organizational rewards, the intrinsic rewards obtained from work, and the link it establishes between high performance and a specific reward (Wang, 2004). The components of expectancy theory are valance, expectancy, and instrumentality (Vroom, 1964/1995). According to Vroom, outcomes are positively valent when a person prefers to attain rather than not, a valance of zero when the person is indifferent to attaining rather than not, and a negative valance when the person would rather not attain. Expectancy is defined as a belief held momentarily followed by a particular outcome and can have a value from zero to one. An expectancy of zero is the person’s subjective probability that his/her behavior will not be followed by an action (Lee, 2007). An expectancy of one is the person’s subjective certainty that his/her behavior will be followed by an outcome (Lee, 2007). The person’s belief is based on his/her confidence on the skills necessary to influence a particular
outcome. Instrumentality is the “probability that performance will lead to a specific outcome (p. 790) and it ranges from -1 to +1. In general, Vroom’s expectancy theory states that effort leads to performance, which ultimately leads to a desired outcome, hence to motivation.

Atkinson’s (1964) expectancy-value model has served as the foundation for today’s expectancy-value theories. Like Atkinson’s theory, the new theories link achievement performance, persistence, and choice to the individual’s expectancy and value beliefs. Unlike Atkinson’s theory, they further elaborate the expectancy and value components linking them to broader psychological and social/cultural determinants (Eccles & Wigfield, 2002). They also assume that expectancies and value are positively related rather than inversely related (Eccles & Wigfield, 2002).

Eccles and Wigfield (2002) theorized and tested an expectancy-value model of achievement related choices. In this model, all choices have costs (values) and probabilities (expectancies) of being fulfilled. The expectancies and values influence task choice, performance, and persistence (Eccles & Wigfield, 2002). In turn, expectancies and values are influenced by task related beliefs such as perceived competence, perceived task difficulty, individual’s goals, and self-schema. These beliefs are influenced by the perception of attitudes and expectations from relevant others, the individual’s affective memories, and their interpretation of past outcomes. In contrast to Bandura’s (1997) claim that expectancy-value theories focus on outcome expectation, Eccles et al. theory focus directly on efficacy expectations (Eccles & Wigfield, 2002).

Eccles and Wigfield (2002) also defined four components of task value: attainment value—the personal importance of doing well on the task, intrinsic value—the
enjoyment in performing the activity or the subjective interest in the subject at hand, utility value—how well a task relates to current and future goals, and cost—the negative aspects of performing the task. Task values predict course plans and enrollment decision in students. Studies on Eccles and Wigfield’s (2002) theory have shown that ability and performance expectancies, which are closely linked to self-efficacy, predict performance in mathematics and English (Eccles & Wigfield, 2002). Eccles et al. findings also reveal that both expectancies and values are predictors in career choices.

Kuhl (as cited in Eccles & Wigfield, 2002) argued that motivation only leads to the decision to act. Once engaged in the action process, individuals are confronted with volitional processes. For Corno (as cited in Eccles & Wigfield, 2002), volitional processes refer to the will needed to complete a task and the diligence to pursue it. Corno differentiates between volition and self-regulation. Volition takes into consideration personality characteristics, aptitudes, and other cognitive processes whereas most models on self-regulation address self-monitoring and self-evaluation (Eccles & Wigfield, 2002). Kuhl proposed several strategies that can be taken to maintain volitional control under distractions and other opportunities that present to the individual as follows: cognitive control strategies, such as selective attention, encoding control, and parsimony of information processing; emotional control strategies that keep at bay anxiety and depression; motivational control strategies that strengthen the current behavior’s base, in particular when other competing intentions are relatively strong; environmental control strategies, which involve limiting one’s environment to facilitate the expected behavior.

Bandura (1999) espoused a social cognitive theory whose basic premise rests on human agency and self-efficacy. In this theory people are active participants in the events
of their lives subject to environmental influences, not just mental observers. Social
cognitive theory explains human psychosocial functioning in terms of the reciprocal
causation among internal personal factors—cognitive, affective, and biological events,
behavioral patterns, and environmental events (Bandura, 1999). Bandura distinguishes
three types of environment: the imposed environment, the selected environment, and the
constructed environment. For Bandura environments are not passively waiting to be
selected by the individual, but are social constructs and institutional systems generated by
the individual. Social cognitive theory espouses “an integrated causal system in which
sociostructural influences operate through psychological mechanisms to produce
behavioral effects” (p. 24).

Social cognitive theory analyzes these behavioral effects and their social diffusion
in terms of three constituent functions: (a) acquisition of knowledge, new ideas, and
practices—the means by which thoughts are formed and manifested; (b) adoption
determinants—these are the elements that determine whether people will put into practice
what they have learned. (Adoption determinants are influenced by self-efficacy,
possession of essential resources, outcome expectation in terms of cost and benefits,
perceived opportunities, and perceived impediments) and (c) the social networks that
bind people together—the interconnectedness created by the individual in its environment
serve a potential path for the diffusion of behavioral effects (Bandura, 1999). This social
diffusion process requires the translation of thought into proficient action. In social
cognitive theory the individual accomplishes this by a conception-matching process.
During this process, the individual constantly self-monitors and makes corrective
adjustments to behavior, comparing the conception of that behavior to the action taken.
With the repetition of activities, skills for task execution (converting thought into action) become fully integrated and easily managed by higher cognitive controls (Bandura, 1999).

Self-efficacy occupies an important role in social cognitive theory and in motivation. For Bandura (1999) efficacy is the belief that one has the power to produce results by one’s actions. Self-efficacy partly leads the individual to adopt goals out of self-influence and the desire for personal challenge, to determine how much effort to invest in these goals, and how long to persevere when confronted with difficulties (Bandura, 1999). This goal setting process becomes a means towards motivation and self-directedness. Motivation results not from the goals themselves but from the process of self-evaluation (Bandura, 1999).

Self-efficacy also plays a role in motivation through outcome expectation or expectancy value theory (e.g., Ajzen & Fishbein, 1980; Atkinson, 1964, Rotter, 1982). As stated earlier, in this view motivation is the multiplicative effect of the expectation that an action will render certain results and the value placed on those results (Bandura, 1999). Bandura suggests that expectancy value theory should also take into consideration self-efficacy effects on the individual. The rationale is based on the possibility that an activity, when done well, can certainly produce valued results, but might not be pursued by the individuals who doubt their own power to fulfill it. As a result, using expectancy value models that exclude self-efficacy considerations could sacrifice explanatory and predictive power (Bandura, 1997).

Efficacy beliefs impact other aspects of human activity such as thought patterns and predictive ability (Bandura, 1999). Individuals use certain thought patterns to
construct future scenarios that guide action. Individuals with high efficacy visualize scenarios that provide positive guides to performance, whereas those with low efficacy visualize failure scenarios that stifle their performance (Bandura, 1999). Another important function of thought is to predict events and devise means by which they can be controlled. “Predictive and operative knowledge must be extracted from probabilistic environmental contingencies containing many ambiguities, redundancies, and uncertainties” (p. 29). Pressing and difficult situations demand a high degree of self-efficacy from the individual. According to Bandura, the ability to discriminate among these factors requires high cognitive efficacy.

The Theory of Planned Behavior

The theory of planned behavior (TPB) is designed to predict and explain behavior in specific contexts addressing cognitive self-regulation within a dispositional approach (Ajzen, 2005). As an extension of the theory of reasoned action, it overcomes the limitations in managing behaviors over which individuals have insufficient volitional control (Ajzen, 2005). The theory accomplishes this by adding perceived behavioral control (PBC). Adding the PBC construct increased the explained variance of the model between 5 to 12 percent. The theory espouses three types of considerations guiding human action: behavioral beliefs—pertaining to the likely outcomes and evaluation of the behavior, normative beliefs—pertaining to the normative expectations of significant others and the willingness to comply with them, and control beliefs—those factors that may contribute or inhibit the desired behavior and the power ascribed to those factors (Ajzen, 2006).

In their aggregate, behavioral beliefs lead to a favorable or unfavorable attitude
towards the behavior, normative beliefs lead to perceived social influence or subjective norm, and control beliefs lead to perceived behavioral control—the individual’s perception about control beliefs closely associated with self-efficacy and reflects past experience as well as anticipated difficulties and obstacles (Ajzen, 2005). In general, the stronger the attitude, subjective norm, and perceived behavioral control the stronger the intention to fulfill the behavior in question (Ajzen, 2005). As a general rule, intention is the most proximal antecedent to actual behavior, but perceived behavioral control and actual behavioral control, together with intention, can also be antecedents to actual behavior given the right conditions (Ajzen, 2005).

Figure 1. Relationship of constructs in the theory of planned behavior.

Ajzen (2005) postulates that given actual control over the behavior, individuals will fulfill their intentions when the opportunity arises, thus moving directly to fulfill the desired behavior. Some behaviors present the individual with extreme difficulties. In these instances volitional or actual control is limited and perceived behavioral control can serve as a proxy to actual control, thus serving as an antecedent to behavior. Figure 1 depicts the relationship between these variables. The TPB is in the public domain and no
permission is needed for an original representation.

The interaction of PBC and intentions not only has an intuitive appeal but other theories have suggested support for it, like Bandura’s social cognitive theory. According to Ajzen (1991), “the relative importance of attitude, subjective norm, and perceived behavioral control in the prediction of intention is expected to vary across behaviors and situations” (p.188). Thus, there will be instances when attitude alone would be sufficient to explain intention, in other situations attitude and subjective norm, and still in others intention will be influenced by all three antecedents.

Beliefs are explained in the TPB as expectancy value formulations where each belief is associated with a given value (Ajzen, 1991). Validity of these formulations is contingent on beliefs being of importance or salient to the individual. These salient beliefs are the prevailing determinants to intention and behavior (Ajzen, 1991). Thus, attitude is directly proportional to the summative product of the belief’s strength and the subjective evaluation or value of the belief. Subjective norm and perceived behavioral control can also be expressed in a similar fashion. Appendix B details these equations in their mathematical form.

Conditions for the theory’s predictive validity are specified by Ajzen (1991), as follows: the measures of intention and perceived behavioral control must correspond with the behavior to be predicted, intention and perceived behavioral control must remain constant between their assessment and their observation, perceived behavioral control should be measured as accurately as possible. According to Ajzen, the theory of planned behavior provides with vast amounts of information about a behavior’s determinants that could be used for changing specific behaviors or planning an intervention.
Although there is plenty of evidence for significant relations between behavioral beliefs and attitudes, . . ., between normative beliefs and subjective norms, and between control beliefs and perceptions of behavioral control, the exact form of these relations is still uncertain. (p. 206).

The inclusion of other constructs that would help explain significant variance not accounted for in the theory, like moral and descriptive norms, has received theoretical and empirical support (Ajzen, 1991; Armitage & Conner, 2001). Moral norms deal with the obligation or responsibility to act or refuse to act upon a specific behavior and it has been used in the theory as perceived moral obligations (Ajzen, 1991). Descriptive norms deals with the behaviors relevant others actually do as compared to subjective norm—what significant others think the person should do (Rivis & Sheeran, 2003). Both of these constructs have shown a significant contribution in predicting behavior (Ajzen, 1991).

Armitage and Conner’s (2001) meta-analytic study quantitatively integrated and reviewed the research of 185 studies on the theory of planned behavior up to 1997. Their findings demonstrated that the TPB accounted for 27% of the variance in behavior and 39% of the variance in intention. Under self-report measures the TPB accounted for 11% more of the variance in behavior compared to objective or observed measures ($R^2$s = .31 and .21 respectively). Rivis and Sheeran (2003) cite several studies in which intentions explain between 19and 38 percent of the variance in behavior, attitudes and subjective norms between 33 to 50 percent, and perceived behavioral control increased the variance by 2 to 12 percent over and above intentions. Conceptual and methodological factors have been attributed by some researchers to account for the unexplained variance. Notwithstanding the theory’s predictive power, Armitage and Conner’s (2001) meta-
analysis demonstrated a weak correlation between subjective norm and intention as compared to the PBC-intention or the attitude-intention correlation. This weak correlation was attributed to the narrow conceptualization of the normative component in the TPB.

The theory of planned behavior has been extensively used for the prediction of social and health behaviors (Hankins, French, & Horne, 2000; Rhodes & Courneya, 2004; Rivis & Sheeran, 2003). Nevertheless, its use in management research has been limited. Studies using the TPB for managerial applications or research have been used in the relocation of facilities (Peach, Jimmieson, & White, 2005), intellectual property (Mykytyn, Mykytyn, & Harrison, 2005), ethics in financial executive decisions (Stevens, Steensma, Harrison, & Cochran, 2005), information technology (Peace, Galletta, & Thong, 2003; Venkatesh, Morris, Davis, & Davis, 2003), information privacy protection (Meng-Hsiang & Feng-Yang, 2003), risk taking in advertising (West & Berthon, 1997), and benchmarking (Hill, Mann, & Wearing, 1996).

Relevance of Motivation

Early theories of motivation, like Herzberg’s hygiene theory and Maslow’s needs theory, expressed specific factors or views that would motivate an individual to act within the organizational context. They also paved the way for more articulate research establishing relationships between the actions that individuals take and their underlying motivating factors. Of special interest to the current study are expectancy value, locus of control, and self-efficacy theories and models. In expectancy-value models of behavior, expectancy refers to beliefs about the individual’s self-perception in accomplishing tasks or activities, values refers to the incentives or reason for doing the task (Eccles & Wigfield, 2002).
Atkinson’s (1964) expectancy-value model has served as the foundation for today’s expectancy-value theories. Like Atkinson’s theory, the new theories link achievement performance, persistence, and choice to the individual’s expectancy and value beliefs. Locus of control theories (e.g., Rotter, 1982) espouse that expectations for success are directly related to the extent that one feels in control of successes and failures (Eccles & Wigfield, 2002). In self-efficacy theories people are active participants in the events of their lives, subject to environmental influences, not just mental observers. This correlational study relies on the leader’s self-efficacy to instill spiritual values in the organization.

Bandura (1999) espoused a social cognitive theory whose basic premise rests on human agency and self-efficacy. Social cognitive theory explains human psychosocial functioning in terms of the reciprocal causation among internal personal factors—cognitive, affective, and biological events, behavioral patterns, and environmental events (Bandura, 1999). Self-efficacy partly leads the individual to adopt goals out of self-influence and the desire for personal challenge, how much effort to invest in these goals, and how long to persevere when confronted with difficulties (Bandura, 1999).

The theory of planned behavior (TPB) is designed to predict and explain behavior in specific contexts addressing cognitive self-regulation within a dispositional approach (Ajzen, 2005). It uses self-efficacy, locus of control, and value-expectancy tenets in establishing a relationship between specific behaviors, intentions, and its antecedents. Ajzen (2005) postulates that given actual control over the behavior, individuals will fulfill their intentions when the opportunity arises, thus moving directly to fulfill the
desired behavior. This correlational study uses the TPB as one of its theoretical constructs in the formulation of a research model.

Conclusion

The manifestation of spirituality, not as a theoretical construct but as part of the human evolution and experience, is grounded on historical, archeological, social, philosophical, physiological, and psychological information and data. Like most nascent paradigms, the scientific study of spirituality in organizations has been besieged by definitional, theoretical, and measurement hurdles (Giacalone & Jurkiewicz, 2003). Some constructs, like workplace spirituality, have attempted to move this topic from rhetoric to a scientific field of investigation (Giacalone & Jurkiewicz, 2003).

The organizational leader plays an important role as a mediator between the embedded social and personal value system and those values of the organization (Nahm et al., 2004). Motivational theories help explain attribution elements of conation. Understanding the transformation of personal values and beliefs into organizational ones can support the growing number of papers, theories, and models in the literature espousing its positive impact on organizational outcomes.

Summary

Academics and practitioners alike have developed theoretical constructs in an attempt to understand and explain the role of spirituality, if any, in the organizational environment. Some studies (e.g., Ashar & Lane-Maher, 2004; Mitroff & Denton, 1999) and leadership theories (e.g., Fry, 2003) have separated spirituality from religion, suggesting the existence of individual and organizational beliefs that can be framed as spiritual characteristics and values of the organization. Others have attempted to link
spirituality characteristics and organizational values to organizational outcomes, such as labor productivity, capital stock, and revenues (e.g., Altman, 2001; Fry, 2003; Jurkiewicz & Giacalone, 2004; Kouzes & Posner, 2002). This amalgam of research has positioned workplace spirituality as a key topic of interest within the management and leadership literature.

Values are a key variable in driving individual and workplace behaviors (Schwartz, 1999). Much of the focus on values research has been geared towards understanding how individuals, groups, organizations, and cultures differ in the values they hold, and how these values impact behavior (Abbott et al., 2005). The field of motivation abounds with theories and models that help explain the transformation of beliefs into action and the motivation of organizational members (e.g., Ajzen, 2005; Bandura, 1999; Rotter, 1982). Among these theories, some expectancy-value models predict dispositional behaviors as a function of intentions influenced, between others, by beliefs and self-efficacy (e.g., Ajzen, 2005; Bandura; 1999). Chapter 3 discusses the methods used in this correlational study. They will be presented within a workplace spirituality framework and employ a social psychology motivation model to look at the relationship between the leader’s beliefs and his motivation to use spiritual values to drive organizational performance.
CHAPTER 3: METHODS

The purpose of this correlational study was to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. The theory of planned behavior (TPB) was used as the theoretical construct that explains the relationship between dependent and independent variables. Appendix C depicts a model diagram of the relationship between variables. The dependent variable was the leader’s use of referent values to drive organizational performance. The independent variables were attitude, subjective norms, perceived behavioral control (PBC), and their belief antecedents: behavioral beliefs, normative beliefs, and control beliefs. The set of values used in this correlational study derive from the workplace spirituality literature, specifically Fry’s (2003) theory of spiritual leadership and Jurkiewicz and Giacalone (2004) workplace spirituality values framework.

Research Design

A quantitative approach was selected for this correlational study. Creswell (2004) suggests three criteria to support the decision-making process of choosing a research approach: fitting the approach to the audience, relating the researcher’s experience to the methodology, and matching the problem to the approach. The current study was written for a business and academic audience lacking accessibility to quantitative studies in the area of spirituality, specifically relating it to organizational performance and leadership (Jurkiewicz & Giacalone, 2004) thus fitting the approach to the audience. Fitting the methodology to the researcher’s experience was also a condition met in this study given the researcher’s previous experience in statistical methods.

In matching the problem to the approach, Creswell (2004) suggests that a
quantitative approach be used when variables are being measured, the current study
assesses the impact of the variables on a particular outcome, when testing theories, and
when the results are applied to a large number of people. The current study assessed the
relationship between the dependent and independent variables as described in the TPB
constructs in a large population and the impact of these constructs in the leader’s use of
spiritual values, thus meeting all of Creswell’s (2004) criteria for a quantitative approach.
The use of quantitative approaches was also supported in the literature. Several
quantitative approaches have been used to study spirituality in the workplace and
leadership (e.g., Ashmos & Duchon, 2000; Fry et al., 2005; Mitroff & Denton, 1999) but
these quantitative approaches are minimal compared to the vast amount of rhetoric,
theories, and constructs in this area (Giacalone & Jurkiewicz, 2003).

Appropriateness of Design

Within the quantitative approach, a correlational design was chosen for the
current study. However, this study was also designed to be explanatory and predictive in
nature. It was explanatory because it explained the relationship between the dependent
and independent variables within the constructs of the TPB. It was predictive in nature
because the analyzed the coefficients in the SEM equations between dependant and
independent variables. The use of a quantitative correlational predictive method was thus
warranted, as it supported in further understanding the role of values in the different
constructs of workplace spirituality and their influence on leadership and organizational
performance.

Other quantitative methodologies were considered such as experimental research
and survey designs. Experimental research would require control and experimental
groups and a level of design complexity was not possible within the time constraints, resources, and the overall disposition of the participants. Assessing the outcome of an intervention for an experimental design was beyond the time limits and resource availability for data analysis. A survey design, although appropriate to the problem, was impractical for the current study. Studying the entire population of leaders would be costly and beyond the time limits of the current study.

Qualitative and mixed-methods were also considered for the current study. Qualitative researchers ask specific narrow questions to explore multiple variables and seek an explanation or understanding of a central phenomenon (Creswell, 2004). This study explored dependent and independent variables and established correlation and predictive capability between them. The consideration of qualitative or mixed-method designs was discarded because the nature and purpose of the problem, time constraints, and subject availability made it impractical.

Correlational-Predictive Model Selection

The purpose of this correlational study required a model or theory linking the leader’s observed behavior to operational constructs with established validity. The model selected needed to directly measure the leader’s overt and covert behaviors reflecting the cognitive, affective, and conative behavioral responses that motivate the leader to take action with regards to a specific behavior defined in the dependent variable. The TPB (Ajzen, 2005) served this purpose by linking the leader’s actual behavior to the independent constructs of intention, attitude, subjective norm, and perceived behavioral control, intention being the closest determinant of actual behavior, and the remaining constructs the determinants of intention. Each of these determinants are then influenced
by behavioral, normative, and control beliefs. The TPB has been used in a wide array of behaviors including some managerial applications. The TPB was selected among other possible models (e.g., Bandura’s social cognitive model) because it was designed to “predict and explain human behavior in specific contexts” (Ajzen, 1991, p. 181) rather than explain behavior in terms of general attitudes and traits. According to Ajzen (2001) there are low empirical relations between general attitudes and traits, and behaviors that are specific to a situation. In addition, the TPB constructs help explain behavior in terms of behavioral, normative, and control salient beliefs. That is, individuals hold many beliefs but can access only some at any given moment (Ajzen, 2005). It thus follows that a leader’s salient beliefs about the set of spiritual values used in the current study and their relationship to the determinants of intention helped explain those factors that facilitate or impede their use in organizational performance outcomes. Questionnaires were used to determine this relationship.

A common characteristic of questionnaires is to operationalize the constructs and measure them through variables expressed as questionnaire items. Traditional measures of spirituality and religiosity often assess individual adherence to a specific religious or spiritual practice, although not necessarily and experience of transcendence linked to organizational outcomes (Giacalone, Jurkiewicz, & Fry, 2005). For example, instruments like the DUREL (Duke University Religion Index) assess religiosity and health outcomes, the Human Spirituality Scale assess non-denominational personal spiritual attributes (as cited in Giacalone et al., 2005), and the Spirituality Assessment Scale (Zwart, 2000) assess transcendent personal attributes.

Several scaling and format options were available to the researcher. For example,
in the spiritual leadership model altruistic love—a sense of wholeness, harmony, and well-being produced through care, concern, and appreciation for both self and others (Fry et al., 2005), is measured by seven questions. Some of these measure organizational qualities like trustworthiness (My organization is trustworthy and loyal to its employees) and care (My organization really cares about its people), while others measure leadership attributes like honesty (The leaders in my organization are honest and without false pride). In Beazley’s Spiritual Assessment Scale transcendence is measured by questions relating to spiritual practices (e.g., I believe that spiritual guidance is available through prayer and meditation) and prayer (e.g., Before making an important decision, I normally pray or meditate). The instruments in these models were considered but discarded as they do not explain behavioral variables leading to a specific outcome.

Research Model Development

A model was developed for this correlational study using the TPB as the theoretical construct. This model depicts the relationship between the dependent and independent variables, the type of measurements, the level of analysis and the minimum number of measurements for each variable, and is shown in Appendix C. It also depicts independent sources of measurement for the dependent and independent variables. The dependent variable was the leader’s use of referent values to drive organizational performance. The operational definition of the dependent variable can be found in Appendix D describing the need for specificity in terms of its target, action, context, and time (TACT) elements. The independent variables were attitude, subjective norm, and perceived behavioral control and their respective antecedents: behavioral beliefs, normative beliefs, and control beliefs.
Behavioral, normative, and control beliefs are expectancy-value measures reflecting the importance and strength of each belief towards the dependent variable (see Appendix B). As such, these expectancy-value measures are labeled as indirect measurements in the model, while measures of the leader’s use of referent values, intention, attitude, subjective norm, and perceived behavioral control are labeled direct measurements in the model. “As a general rule, the more favorable the attitude and subjective norm with respect to a behavior, and the greater the perceived behavioral control, the stronger should an individual’s intention to perform the behavior under consideration” (Ajzen, 1991, p. 188).

The level of analysis of the research model was at the individual level. Direct measurements of the dependent variable were obtained from both the leader and his/her subordinate. Indirect measurements for the independent variables were obtained from the leader. A minimum of 83 items were used to measure the dependent and independent variables not counting those questions in the elicitation study. They were used in three different questionnaires: The first assessed the leader’s self-evaluation with regards to the dependent variable and his/her attitude towards the referent values. The second obtained the subordinates evaluation of the dependent variable as it pertains to the leader and his/her attitude towards the referent values, and the third assessed the independent variables as perceived by the leader. These items obtained measures from the different constructs in the independent variable, the dependent variable, the degree of importance of the referent values, and a description of these values as perceived by the leader. Demographic data was also collected from both the leader and his/her subordinate.
Common Methods Variance

Common method variance (CMV) represents a potential problem in behavioral research. It takes place when variance can be attributed to the measurement method rather than the constructs the measures intend to represent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). There are scientific arguments supporting and refuting the importance and magnitude of CMV, but careful design of measurements and construct selection can attenuate its effect (Spector, 2006). Common method biases can surface from a variety of sources such as the content of specific items, scale type, response format, and the general context (Podsakoff et al., 2003).

According to Podsakoff et al. (2003), potential causes for biases stem from four potential root effects: common rater effects, item characteristics effects, item context effects, and measurement context effects. Common rater effects are attributed by artifactual covariance between the dependent and independent variable when measured by the same respondent. Item characteristic effects cause artifactual covariance by the influence or interpretation the respondent might ascribe to an item solely on its particular characteristic or property. Item context effects refer to the influence or interpretation a respondent might ascribe to an item because its relation with other items in the instrument (Wainer & Kely, as cited in Podsakoff et al., 2003). Measurement context effects are caused by artifactual covariance coming from the context in which the measurements are obtained. Several of these effects can operate on any given study. Common method biases can be controlled by designing careful method procedures and through statistical controls (Podsakoff et al., 2003).

If the dependent and independent variable can be obtained from different sources,
Podsakoff et al. (2003) recommend the use of procedural remedies in the questionnaire design rather than using a multi-method design or statistical controls. By obtaining the measures of the dependent and independent variables from different sources, the current study avoided effects such as: consistency motifs, implicit theories, social desirability tendencies, dispositional and transient mood states, and any tendency from the rater to respond in a lenient manner. In one part of this study the independent variable was rated by the leader and the dependent variable by its subordinate. At a later point in time, the leader also rated the dependent variable. This temporal separation of measurements is recommended by Podsakoff et al. to control “biases in the retrieval stage of the response process” (p. 888) such as: avoiding the use of previous answers from the respondent to fill in gaps or infer details, and reducing biases in the editing of the response process by making prior information less salient or available to the respondent.

This correlational study also employed anonymity in gathering measurement responses. Participants were assured that there was no right or wrong answers and that any question should be answered as honestly as possible. According to Podsakoff et al.(2003) this technique reduces evaluation apprehension and the respondent’s tendency to rate items in a socially desirable manner. To accomplish complete anonymity, a third party handled the process of managing the sending and receiving process of questionnaires. Access to questionnaire information will be through a code linking the leader and subordinate from the same organization. Other measures taken to avoid common method biases were as follows: counterbalancing the question order to reduce priming effects and item-context-induced mood states, and using different scale endpoints and anchoring effects. In using most of the procedural recommendations by
Podsakoff et al. the current study reduced and controlled the amount of variance attributed to CMV.

Research Process Plan

The research process attended to the following: CMV issues, internal consistency of measurements, respondent’s perception on length, clarity, and effectiveness, and instrument reliability. Appendix E depicts a process diagram and the critical steps followed to fulfill these requirements. The research process was broken down into four phases. Phase I was the preparation phase of the research study comprised of four tasks. The purpose of this phase was to prepare the groundwork for instrument design and data collection by selecting the sample population, develop a codec, and establishing a third party for sending and receiving the questionnaires that were used.

Phase II entailed the elicitation study—the collection of participant information used in designing the indirect measures of the independent variables. The key step in this phase was to gather the modal salient beliefs about the referent values from the participants and test them for accuracy. Modal salient beliefs were necessary to develop the indirect measurements items of the independent variables. Salient beliefs were considered in expectancy-value formulations for each of the independent variables dealing with respondents’ beliefs, namely: behavioral, normative and control beliefs. Appendix B shows the different formulations for each predictor variable.

These formulations were the product of the belief strength for each independent variable and the positive or negative evaluation of the belief statement. Ajzen (2006) and Francis et al. (2004) suggest eliciting beliefs and evaluations directly from the participants. In the current study, participants were given a list of referent values taken
from Fry’s (2003) theory of spiritual leadership and Jurkiewicz and Giacalone’s (2004) framework. A list of the referent values used can be found in Appendix A. Both of these constructs link spiritual values to organizational performance. Participants were prompted questions in the elicitation study, which can be found in Appendix F, to obtain the salient beliefs and their respective evaluations regarding these referent values and the specific behavior under consideration. From this list of personal salient beliefs a list of modal salient beliefs—the most commonly held beliefs in the sample, was formulated. Content analysis of the responses from the elicitation study was carried out to determine modal salient beliefs. The behavioral beliefs were categorized into major themes that were used in the construction of the indirect measures. These modal salient beliefs became instrumental in developing the indirect measurements for the current study.

Phase III consisted of a pilot test for reliability and internal consistency using a subset sample of the population. In phase IV a final questionnaire was developed and all documentation prepared to start data collection and assess the study’s validity.

Research Questions

As part of the organizational culture, spirituality has been argued to have practical and ethical utility leading to performance in organizations (Fry et al., 2005; Garcia-Zamor, 2003a, 2003b; Giacalone, & Jurkiewicz, 2003; Jurkiewicz & Giacalone, 2004; Pfeffer, 2003). If spirituality is an underlying factor in organizational performance mediated by the organization’s culture, and there is a relationship between the leader’s beliefs and organizational culture, then the leader’s spiritual beliefs can be related to organizational values that lead to performance.
The constructs in the TPB (Ajzen, 2005) provided a working platform that guided the formulation of research questions linking beliefs and organizational values to the leader’s behavioral response. Using the TPB’s theoretical construct a research model was constructed (Appendix C) from which to infer appropriate research questions as follows: (a) Which TPB variables influence the leader’s intention to use spiritual values as part of the organizational culture to drive organizational performance? (b) Do leaders in Puerto Rico use spiritual values in their organizational culture to drive organizational performance? (c) Can the TPB be used as a predictive model for the use of spiritual values to drive organizational performance?

The predictive and explanatory nature of this correlational study required a set of hypothesis to test both, the relationship among the different variables and the predictive capability of the research model presented in Appendix C. Hypothesis $H1$ was designed to test the explanatory nature of the study and hypothesis $H2$ to test the predictability of the model. In $H1$ a relationship was sought between intention, the proximal antecedent of actual behavior, and the constructs of the model: attitude, subjective norms, and perceived behavioral control. As part of the testing for $H1$, the relationship between these constructs and their respective belief antecedents were explored. The following correlations were sought: behavioral beliefs to attitude, normative beliefs to subjective norms, and control beliefs to perceived behavioral control.

In $H2$, the predictability of the model was tested by analyzing coefficients in the SEM equations between the dependant variable assessing the behavior of the leader to drive organizational performance (outcome measures related to financial success, operational effectiveness, customer focus and organizational well-being) and the
independent variable of intention. The correlations between the subordinate’s perceptions of the leader’s actual behavior, the leaders own assessment of her/his actual behavior, and intention was explored. According to Ajzen’s (2005) theory of planned behavior, there should be positive relationships between the constructs leading to the actual behavior being assessed. Intention, the proximal antecedent to actual behavior, was expected to have a significant correlation with actual behavior. The study hypotheses are as follows:

The study’s hypotheses were as follows:

$H1_0$: There is no correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

$H1_A$: There is a correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

$H2_0$: There is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

$H2_A$: There is a correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

Population

The unit of analysis for this correlational study was the organizational leader and his/her subordinate in private and public organizations in Puerto Rico with two or more employees. Organizations with one employee were not considered to maximize the number of respondents in the sample. According to the U.S. Census Bureau, there are 17,504 registered private businesses in Puerto Rico under the North American Industry
Classification System (NICS) that met the above criteria (U.S. Department of Commerce, 2006a, 2006b, 2006c).

These businesses are grouped together under the general classifications of wholesale, retail, construction, and manufacturing. The U.S. Census Bureau publishes three reports, one for wholesale and retail, one for construction, and another for manufacturing every five years. The type of businesses included in the U.S. Census Bureau range from small retail and personal businesses, to mid-size and large corporations covering a wide array of services and products (U.S. Department of Commerce, 2006a, 2006b, 2006c). Data from businesses that are not registered and agencies not formally listed are not considered, although they are part of the total number of businesses operating in Puerto Rico.

The population for this correlational study consisted of organizational leaders who were responsible for establishing and promoting cultural values in their organization, who had responsibility for organizational performance and who understood business English in a written format. According to Schein (1992) these types of individuals are at the highest level of responsibility within any given organization, usually bearing the role of chief executive officer, general manager, president, founder, and owner among others. It may also include divisional heads of large corporations who have responsibility over multiple departments or functions.

The target population was leaders that met this criterion who belonged to one or more of the following: Chamber of Commerce of Puerto Rico, Puerto Rico Manufacturers Association, the Business Register, and the government agencies listed in the Puerto Rico Government Agencies Directory. These were selected because the
names, addresses, email, and telephone of the individuals leading these organizations were publicly available.

**Sampling Frame**

Probability sampling was used as the sampling methodology. According to Creswell (2004), probability sampling is the most rigorous procedure in quantitative research. Of the basic types of probability sampling, a simple random sampling approach was selected. In simple random sampling all participants have the same probability of being selected and thus any bias in the population is equally distributed (Creswell, 2004). The sample size was set at 111 response pairs at a confidence level and statistical power of 95% and a desired effect size of $r = .3$. The G*Power® software was used to make these calculations. A response pair consisted of an organizational leader and one subordinate who reported directly to that leader. These leader-subordinate pairs constituted the participants. Thus, the 111 response pairs translated to 222 participants. Once the leader-subordinate pair was identified, the subordinates participating in this correlational study were picked at random from a list of those subordinates reporting to the leader.

Response rates had an impact on the actual number of questionnaires received from participants. Creswell (2004) states that response rates of 50% or better are often cited in studies with mailed questionnaires, but because response rates can vary from population to population a conservative approach was taken and a 20% response rate was assumed. With the established response rate condition, 555 target population members were programmed to be contacted to obtain a sample of 111 leader-subordinate pairs. Strategies such as pre-notification of participants, follow-up calls, follow-up notices, and
email reminders were used to increase the return rate percentage. In addition, endorsements from the Puerto Rico Chamber of Commerce, the Puerto Rico Manufacturers Association, and government were sought.

The strategy was to make a list of business names from the target population directories and alphabetically enter them into an Excel® spreadsheet. Members were independently numbered from one to as many members in the directories of the target population. Computer based random number generators, like those available in Excel®, were used to select participants for the study. From the selected participants a database that includes the name of the leader and subordinate in the organization, address, telephone number, email, and alternate contact person was generated. The participants were independently numbered from 1 to 111 as a leader/subordinate pair. Subordinates were selected from a list provided by the organizational leader that included all those employees who directly report to that leader. Subordinates were picked at random from this list and asked to read and sign the informed consent in Appendix G or its equivalent Internet enabled form. This database was later used for sending the questionnaires.

Informed Consent

Consent was obtained from every participant in this correlational study prior to completing the questionnaire using the informed consent form in Appendix G. Consent forms and questionnaires were emailed to participants or made available through a secure website for download. Questionnaires and completed responses handled via the Internet were encrypted using a secured sockets layered protocol (SSL). The consent took into consideration the following participant concerns: personal risk, confidentiality of the data, type of participation, and anonymity. The study did not represent any physiological
or psychological risk to the participants. There was no perceived benefit to the
participants. Partaking in the study required participants to be 18 years of age or older.
The names of the participants were not used in the analysis, or in the results, thus
assuring participant confidentiality. Participants had the right to ask questions and receive
the results of the study if they so choose.

Voluntary participation was solicited. Participants partaking in the study had to
sign the consent form and send it with the questionnaire or its equivalent electronic
process. There were no repercussions to those who did not participate. To assure
anonymity of the data analysis process all questionnaires were coded establishing the
relationship between the questionnaire and the participant’s workplace. The existence of
a codebook was necessary for follow-up purposes. This code was entered into an Excel ®
spreadsheet which was password protected. A hard copy of the codebook will be kept in a
secure location for a minimum of three years. After this period the codebook will be
permanently destroyed by a commercial grade shredder. Those participants that declined
to participate were sent a thank you letter.

Instrumentation

The TPB belongs to the public domain and did not require permission for use.
The TPB is designed to study a specific behavior outcome selected by the researcher, as
such; the construction of an instrument is content specific to the behavior under
consideration requiring the design of specific item measurements. Because of its
extended use in the social sciences, several design and construction aids have been
published. The current study used three different methodological recommendations in the
construction of the three questionnaires: those of Ajzen (2006) were used for item
construction, methodological, and conceptual considerations; those of Francis et al. (2004) were used for item construction, data collection, and data analysis; finally those of Hankins et al. (2000) were used for data analysis and statistical considerations.

The guidelines established by these researchers avoided common pitfalls in constructing questionnaires using the TPB constructs such as: item construction, scale development, format, and length. The TPB was selected over other existing models because the predictive validity of its constructs is well established in the literature (Ajzen, 2006). There are differences of opinion between researchers regarding scaling parameters, such as the use of unipolar versus bipolar scales and conceptual considerations, such as item construction for the construct of attitude (Ajzen, 2006). Nevertheless, these differences do not change the model’s predictive or explanatory validity or the significance of the independent variables (Francis et al., 2004).

**Verbal Response Scale Techniques**

Self-report questionnaires were used from the leader and his/her subordinate using verbal response scales to find the relationship among the dependent and independent variables. The technique of using verbal response scales has resulted in valid and reliable measures, but they are prone to systematic distortions and biases, especially when socially sensitive topics are being investigated (Ajzen, 2005). The more sensitive the topic the more difficult becomes for the participant not to engage in self-presentation biases.

Ajzen (2006) and Francis et al. (2004) recommend that direct and indirect measures be taken on the TPB independent variables. With the exception of the behavior under consideration all other variables in the model are psychological constructs (Francis
et al., 2004). Except for intention, which was directly measured, the other independent variables of attitude, subjective norm, and perceived behavioral control were directly and indirectly measured. According to Francis et al. (2004), direct measures assess the participants’ perception regarding the behavior in question (e.g., by asking the participants about their overall attitude towards the behavior) and indirect measures assess the participants’ salient beliefs toward the behavior in question (e.g., by asking participants about specific behavioral beliefs and outcome evaluations). According to Ajzen (2005) expectancy-value formulations derived for each independent variable is an effective way to measure the participant’s salient modal beliefs. Appendix B shows the expectancy-value formulations for each predictor variable.

Description of Questionnaires

Three questionnaires were devised to reduce CMV biases, specifically to reduce common rater effects. Common rater effects are attributed by artifactual covariance between the dependent and independent variable when measured by the same respondent. In the current study measurements for the dependent variable were obtained from both, the leader and his/her subordinate, thus avoiding common rater effects. The independent variables were measured only by the leader’s responses. All questionnaires can be found in the Appendix section. Items in these questionnaires are set according to the specific construct in the model but were mixed in the actual questionnaires sent to participants to avoid CMV issues.

The Leader’s Dependent Variable Questionnaire (Appendix H) measured the leader’s attitude towards the referent values and obtained actual estimates on the dependent variable. The questionnaire has three sections: the first gathered demographic
data pertaining to the leader and his/her organization, the second explored the leader’s
ttitude towards the referent values expressed as value statements for each individual
value in Appendix A, and the third gathered estimates on the dependent variable. There
are three items in the demographic questions to assess the use of explicit or implicit
organizational values to drive performance (Does the business you work for have a set of
organizational values? To what extent do you believe these values are important in
driving organizational performance? To what extent does your superior use these values
in doing his/her work?). An item was introduced in the second section to assess the
leader’s perception on the way to classify the referent values (Select the description(s)
you feel best describes these set of value statements).

The Subordinate’s Dependent Variable Questionnaire (Appendix I) measured the
subordinate’s perception on the leader’s attitude towards the referent values and the
dependent variable, and obtained actual estimates on the dependent variable for the
leader. The questionnaire has four sections: the first gathered demographic data
pertaining to the subordinate, the second explored the subordinate’s perception of the
leader’s attitude towards the referent values expressed as value statements for each
individual value in Appendix A, the third explored the subordinate’s perception of the
leader’s attitude towards the use of referent values, and the fourth gathered the
subordinate’s estimates on the dependent variable. As with the Leader’s Dependent
Variable Questionnaire, the same items were included in the Subordinate’s Dependent
Variable Questionnaire to assess the implicit or explicit use of organizational values to
drive performance and the subordinate’s perception on the way to classify the referent
values.
The Leader’s Independent Variable Questionnaire in Appendix J measured the constructs of intention, attitude, subjective norm, and perceived behavioral control and their belief antecedents. The questionnaire has two sections. The first section presents the referent values as value statements for the participant to review. This section is necessary due to the time lag between this questionnaire and the Leader’s Dependent Variable Questionnaire, which allowed participants to retrieve from memory the concept of referent values. The second section explored the direct and indirect measures for the different constructs.

Construction of Questionnaires

A detailed description on the construction of items for these questionnaires is presented in this section and can be found in Appendix K. This section specifies the direct measures for intention, attitude, subjective norms, and PBC. It also describes item construction for the indirect measures of behavioral, normative, and control beliefs. Rationale for selection of specific measures is given and the means to calculate specific average scores from the different items pertaining to a single construct.

Direct measures for intention. Three items were used in the Leader’s Independent Variable Questionnaire (Appendix J) to measure intention. Albeit the conceptual differences between the phrases I expect, I want, and I intend, they have shown considerable response consistency in empirical studies (Armitage & Conner, 2001). Scoring is obtained by calculating the mean of the three intention scores. Intention will be measured with a seven-point scale format as follows:

1. I expect to use referent values on a daily basis to drive organizational performance
Strongly disagree 1  2  3  4  5  6  7 Strongly agree

2. I want to use referent values on a daily basis to drive organizational performance.

   Strongly disagree 1  2  3  4  5  6  7 Strongly agree

3. I intend to use referent values on a daily basis to drive organizational performance

   Strongly disagree 1  2  3  4  5  6  7 Strongly agree

*Direct measures for attitude.* Attitude will be measured in the Leader’s Predictor Variable Questionnaire (Appendix E) using a semantic seven-point differential scale.

Developed by Osgood, Suci, and Tannenbaum (as cited in Graeme, 2006), semantic differential scales measure the connotative meaning of concepts. Connotative meaning refers to the emotional association, evaluations, judgments, and individual’s reactions to a concept (Graeme, 2006). Osgood et al. (as cited in Graeme, 2006) suggested that connotative meaning and their associated concepts be evaluated within an evaluative, potency, and activity dimensions. Semantic differential scales are constructed by the use of bipolar adjectives that define meaning for the concept being studied. Evaluative dimensions comprises semantic differentials such as good-bad, potency dimensions use semantic differentials such as strong-weak, and activity dimensions use semantic differentials such as active-passive (Graeme, 2006).

Heise (as cited in Graeme, 2006) postulates that semantic differential scales have been extensively used and tested demonstrating high reliability, validity, and effectiveness. Ajzen (2006) suggests two criteria for semantic differential construction: first, using item-total correlations or reliability measures to select adjective pairs that
show high internal consistency, second, to use instrumental and experiential components. Instrumental terms are represented by adjective pairs such as valuable-worthless, and harmful-beneficial, whereas experiential terms are reflected by scales such as pleasant-unpleasant, and enjoyable-unenjoyable. A good-bad scale should also be included as it captures overall evaluation (Ajzen, 2006). The measurement will include negative endpoints as recommended by Francis et al. (2004). Scoring for the direct measurement of attitude will be done by recoding items that were negatively worded so that the positive attitude is reflected by the higher number in the scale (e.g., for good-bad, an answer of 6 becomes a score of 2; a score of 4 remains a 4). The mean of the item scores will be calculate for an overall attitude score. The direct measures for attitude will be as follows:

For me to use referent values on a daily basis to drive organizational performance is

| Harmful | 1 2 3 4 5 6 7 | Beneficial |
| Pleasant | 1 2 3 4 5 6 7 | Unpleasant |
| Good | 1 2 3 4 5 6 7 | Bad |

The wrong thing to do 1 2 3 4 5 6 7 thing to do

Good practice 1 2 3 4 5 6 7 Bad practice

Direct measures for subjective norm. Subjective norm will be measured in the Leader’s Independent Variable Questionnaire (Appendix J) using a seven-point scale. Both injunctive and descriptive items were used as recommended by Ajzen (2006).
Injunctive items address the participants perceptions on what relevant others think while descriptive items address what relevant others actually do. Items ending in incomplete sentences will be arranged so that the scales are a mix of positive and negative endpoints. Scoring for the direct measurement of attitude will be done by recoding items that were negatively worded so that high scores consistently reflect greater social pressure (Francis et al., 2004). The mean of the item scores will be calculated for an overall subjective norm score. Direct measures of subjective norm will be measured as follows:

1. Most people who are important to me think that

   I should  1  2  3  4  5  6  7  I should not

   use referent values on a daily basis to drive organizational performance

2. It is expected of me that I use referent values on a daily basis to drive organizational performance.

   Strongly disagree  1  2  3  4  5  6  7  Strongly agree

3. I feel under social pressure to use referent values on a daily basis to drive organizational performance.

   Strongly disagree  1  2  3  4  5  6  7  Strongly agree

4. People who are important to me often use referent values on a daily basis to drive organizational performance.

   Strongly disagree  1  2  3  4  5  6  7  Strongly agree

*Direct measures for perceived behavioral control.* Perceived behavioral control will be measured in the Leader’s Independent Variable Questionnaire (Appendix J) using a seven-point scale that reflects the participant’s confidence in performing the behavior.
under consideration. Perceived behavioral control is assessed by the participant’s self-efficacy and their beliefs about the amount of control they have over the behavior under consideration (Francis et al., 2004). Asking participants the degree of difficulty in doing the behavior and their confidence that they can do it assesses self-efficacy. Asking participants whether performing the behavior is up to them and whether factors beyond determine the behavior assesses controllability (Francis et al.). Recoding items that were negatively worded so that high scores consistently reflect greater control to do the target behavior will reflect scores for the direct measurement of perceived behavioral control (Francis et al., 2004). The mean of the item scores will be calculated for an overall subjective norm score. Direct measures of perceived behavioral control will be measured as follows:

Self-efficacy:

1. I am confident that I could use referent values on a daily basis to drive organizational performance if I wanted to.

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

2. For me to use referent values on a daily basis to drive organizational performance is.

   Easy 1 2 3 4 5 6 7 Difficult

Controllability:

3. The decision to use referent values on a daily basis to drive organizational performance is beyond my control.

   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
4. Whether I use referent values on a daily basis to drive organizational performance or not is entirely up to me.

Strongly disagree  1  2  3  4  5  6  7 Strongly agree

_B Modal Salient Beliefs_. The elicitation study (Appendix F) will gather the behavioral, normative, and control beliefs to be used in the indirect measures—_modal salient beliefs_. The questions to be answered by the participants are as follows:

**Behavioral beliefs:**

1. What do you believe are the advantages of using referent values in the culture to drive organizational performance on a daily basis?

2. What do you believe are the disadvantages of using referent values in the culture to drive organizational performance on a daily basis?

3. Is there anything else you associate with using referent values in the culture to drive organizational performance on a daily basis?

**Normative beliefs:**

1. Are there any individuals or groups who would approve of you using referent values in the culture to drive organizational performance on a daily basis?

2. Are there any individuals or groups who would disapprove of you using referent values in the culture to drive organizational performance on a daily basis?

3. Are there any other individuals or groups who come to mind when you think about using referent values in the culture to drive organizational performance on a daily basis?

**Control beliefs:**
1. What factors or circumstances enable you to use referent values in the culture to drive organizational performance on a daily basis?

2. What factors make it difficult or impossible for you to use referent values in the culture to drive organizational performance on a daily basis?

3. Are there any other issues that come to mind when you think about using referent values in the culture to drive organizational performance on a daily basis?

Belief strength and outcome evaluation measures will be constructed from the elicitation study’s modal salient beliefs and pilot tested for clarity and ease of understanding. According to Ajzen (2006), internal consistency is not necessary between the belief composites. The use of unipolar or bipolar scaling for belief strength and outcome evaluation is a subject of debate in the literature (Ajzen, 2005, 2006). The current study used a mix of unipolar and bipolar scales as suggested by Francis et al. (2004). By having the midpoint represented by a score of zero in a bipolar scale, beliefs marked as such would make no contribution to the behavior under consideration.

Seven point scale and bipolar scale formats were used in the Leader’s Independent Variable Questionnaire (Appendix J) for the indirect measures of attitude, subjective norms, and perceived behavioral.

Data Collection and Analysis

The survey questionnaires for this correlational study were accessed via the Internet. The questionnaires were available to participants in SurveyMonkey.com. Data obtained in the questionnaires were transferred to a Microsoft® Excel® spreadsheet. A codebook was used to maintain the participant’s anonymity from the data analysis. A matrix was constructed from the available data, where the rows represent the code for
each respondent and the columns the different item responses from the questionnaire. All questionnaire items were independently numbered and coded to establish a relationship between the items and the different constructs of the independent and dependent variables. The data was transferred to the SPSS software package with the AMOS application.

Statistical Procedures

Statistical procedures for the TPB are usually confined to the use of multiple linear regression or structural equation modeling techniques (SEM) (Hankins et al., 2000). This correlational study used SEM in analyzing the data from the questionnaires. Although SEM can be considered an extension of multiple regression analysis it has several features that give the researcher more options to analyze the data as compared to multiple linear regression.

In multiple linear regression the impact of independent variables over a dependant variable can be measured but is never clear to what extent the relationship between variables has been reduced by poor measurement (Hankins et al., 2000). In contrast, “SEM allows the examination of how well individual variables are measured at the same time as the examination of the extent to which variables are related to each other” (pp. 154-155). SEM achieves this by the use of latent variables specified by the researcher. The researcher can choose which questionnaire items are hypothesized to measure a construct. Another advantage of SEM over multiple regression is the level of modeling complexity it allows. Using linear regression the TPB would have to be analyzed in two steps; one to assess the influence of the independent variables of attitude and subjective norm, and another to assess the influence of intention and perceived behavioral control on
the behavior (Hankins et al.). *SEM* can also assess the extent to which the TPB fits the sample data. This can be applied to any other theory, thus allowing for comparison of different theoretical constructs.

*SEM* techniques are based on assumptions that are often overlooked in the analysis of data (Hankins et al., 2000). These assumptions are in the following areas: linearity of the relationships, multivariate normality, sample size and power, construct unidimensionality, and the effect of multiplicative composites. As with linear regression, *SEM* presumes a linear relationship between variables. Non-linear variables tend to be poorly related in *SEM*. In SEM, normality is achieved by the use of latent variables specified by the researcher. The researcher can choose which questionnaire items are hypothesized to measure a construct. Another advantage of *SEM* over multiple regression is the level of modeling complexity it allows, also an assumption in estimation procedures. Violating this assumption makes *SEM* over-estimate the extent to which the model fits the data (Hankins et al., 2000). Goodness of fit for the current study was based on the chi-squared statistic; however, statistical power for *SEM* often does not appear as a matter of course (Hankins et al., 2000). A poor fit increases the probability of a Type II error—accepting the null hypothesis when it is false (Hankins et al., 2000).

The TPB assumes that the constructs of subjective norm and attitude are unidimensional—each construct is a single, homogeneous entity. If the study does follow the TACT elements, more than one aspect of, for example, attitude will be measured increasing the probability of the model not fitting the data well. Hankins et al. (2000) argue that the multiplicative effect of the indirect measurements in the TPB do not constitute a measure of what is really intended. They also postulate that eliciting modal
beliefs does not require the multiplicative function in the indirect measurements. They recommend creating a simple measure based on the self-reported beliefs of the participants. Albeit Hankins et al. (2000) recommendations regarding the multiplicative effect, the current study used the indirect measurements specified by Ajzen (2006) as they have been used in other TPB analysis using SEM.

Validly and Reliability

Reliability addresses the stability of an instrument through time; the ability to provide consistent scores results for the constructs under consideration (Creswell, 2004). There are five types of reliability recognized by Creswell: test-retest, alternate forms, alternate test and test retest reliability, inter-rater reliability, and internal consistency. This correlational study used internal consistency reliability measures for the specific model shown in Appendix C. “Scores from an instrument are reliable and accurate if they are internally consistent” (Creswell, 2004, p.182). Internal consistency was measured with Cronbach’s coefficient alpha as recommended by Creswell (2004) and Ajzen (2006). Cronbach’s alpha indicates the extent to which items in an instrument measure the latent variable. Francis et al. (2004) suggests that alpha coefficients larger than .6 represent an acceptable criterion for internal consistency.

According to Creswell (2004), validity “means that researchers can draw meaningful and justifiable inferences from scores about a sample or population” (p. 183). Onwuegbuzie (2000) further differentiates validity by making a distinction between internal and external validity. Internal validity is described as the condition that observed differences on the dependent variable are a direct result of the independent variable and not other unknown variable. External validity is described as the extent to which results
from the study can be generalized across populations, settings, and times. There are four types of validity to take into account: content validity, criterion or independent variable related validity, predictive validity, and construct validity (Creswell, 2004).

Onwuegbuzie (2000) has identified possible threats to internal and external validity. Identifying these threats has three advantages: it provides information to the reader about possible sources of invalidity allowing the reader to place the findings of the study in proper context, it provides direction for future research, it could be used in validity meta analyses (Onwuegbuzie, 2000). Threats to internal and external validity can happen in the research design and data collection, the data analysis, and data interpretation stages of the study.

The internal validity threats that affected this study were: instrumentation, matching bias, and reactive arrangements. The external validity threats that affected this study were: population validity, ecological validity, temporal validity, reactive arrangements, matching bias and specificity of variables. Several measures were taken to minimize some of these threats as shown in Appendix L. All four types of validity identified by Creswell (2004) were assessed. The recommendations and guidelines provided in Ajzen’s (2005) and Francis et al. (2004) avoided common validity pitfalls such as: item construction, scale development, format, and length will be avoided. These recommendations were also followed on those items with different scaling options or expectancy-value measures. For example, scaling parameters for attitude, which used semantic differential adjectives, are difficult to provide because they have to be relevant to the behavior under consideration, but the guidelines in Ajzen lead the researcher through the appropriate steps to select the proper semantic differentials.
The use of SEM as a data analysis technique allowed the use statistical methods to test the independent variable, predictive, and construct validity of the instrument in the current study. The path coefficients provided by SEM were used to correlate the scores of the instrument to the specific outcome—the use of referent values (independent variable reliability). Predictive validity was tested by analyzing SEM coefficients in the equations between dependant and independent variables finding significant and strong correlations in some. Although the TPB’s predictive validity is well established in the literature (Ajzen, 2006) there are differences of opinion between researchers regarding scaling parameters, such as the use of unipolar versus bipolar scales, and conceptual considerations, such as item construction for the construct of attitude (Ajzen, 2006). Nevertheless, these differences do not change the model’s predictive or explanatory validity or the significance of the independent variables (Francis et al., 2004). Construct validity was tested with the path coefficients to corroborate that the scores to items are related in a manner consistent with the relationships established for the independent and independent variables in the TPB.

Summary

The purpose of this correlational predictive study was to identify, test, and predict the variables mediating the leader’s behavioral response to spiritual values in driving organizational performance. Spiritual values were selected from the literature, specifically those from Fry (2003), and Jurkiewicz and Giacalone (2004). A correlational-predictive approach was selected. The theory of planned behavior (Ajzen, 2005) was used as the theoretical construct that establishes the relationship among the variables of interest, mainly the behavior of the leader—the use of referent values on a
daily basis to drive organizational performance (dependent variable), to intention, attitude, subjective norm, and perceived behavioral control (independent variables). Behavioral, normative, and control beliefs were also examined as antecedents to the predictor variables. The design of this research took into consideration common method variance biases. Procedural and statistical measures recommended by Podsakoff et al. (2004) were taken to avoid those.

The level of analysis was the individual, specifically the organizational leader and one subordinate, working for government agencies and private organization, in Puerto Rico, with two or more employees. The target population was those leaders that belonged to one or all of the following: Chamber of Commerce of Puerto Rico, Puerto Rico Manufacturers Association, the Business Register, and the government agencies listed in the Puerto Rico Government Agencies Directory.

The instrument used for this correlational study was designed following the guidelines provided by Francis et al. (2004), Ajzen (2006), and Hankins et al. (2000). These guidelines avoided potential instrument and methodological problems, such as item construction, scaling, internal consistency, and data analysis methods. Structural equation modeling using (SEM) the SPSS software package with the AMOS application was used for data analysis. The current study tested for reliability and validity using Cronbach’s alpha, and SEM’s path coefficients. Chapter 4 will present the results of the analyzed data using the structural modeling technique. It includes analysis of the data and the testing of hypotheses.
CHAPTER 4: RESULTS

The purpose of this correlational study was to identify, test, and predict the variables mediating leader behavioral response to spiritual values and its effect on organizational performance. Only complete survey data for 105 leader-subordinate pairs was collected and analyzed.

In Chapter 4 the constructs of variables were explained and the reliability and validity of the Likert type scale measures used on the constructs were evaluated. The descriptive statistics of individual measurements and constructs, including mean, standard deviation, statistics skewness for continuous variables, and frequency and percentage of categorical variables, were summarized.

The Leader’s Dependent Variable Questionnaire (LQ I) was used to measure the leader’s attitude toward the referent values and to obtain actual estimates of the dependent variable. The Subordinate’s Dependent Variable Questionnaire (LQ III) was used to measure the subordinate’s perception on the leader’s attitude towards the referent values and the dependent variable, and to obtain actual estimates on the dependent variable for the leader. The Leader’s Independent Variable Questionnaire (LQ II) was used to measure the behavioral, normative and control beliefs of the leaders. An elicitation study was done to obtain the salient beliefs used in the development of indirect measures in the LQ II questionnaire.

For the LQ III and LQ I the response from leaders and subordinates were separately analyzed and descriptive statistics obtained. Structural equation modeling was used to analyze the data obtained from all three questionnaires. The $t$ test statistic was used to determine the significance of the results at the .05 level. In line with the research
purpose, the following research questions were proposed: (a) Which TPB variables influence the leader’s intention to use spiritual values as part of the organizational culture to drive organizational performance? (b) Do leaders in Puerto Rico use spiritual values in their organizational culture to drive organizational performance? (c) Can the TPB be used as a predictive model for the use of spiritual values to drive organizational performance?

The following research hypotheses were formulated:

\( H1_0 \): There is no correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H1_A \): There is a correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H2_0 \): There is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

\( H2_A \): There is a correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

Description of Variables

All variables represent psychological constructs derived from Ajzen’s (2005) theory of planned behavior as follows:

1. Behavioral beliefs. Denoted as \( \text{Behbelief} \). Addressed in the LQ II questionnaire by item questions IMAO1 through IMAO5 and IMAE1 through IMAE5.
2. Normative beliefs. Denoted as *Norbelief*. Addressed in the LQ II questionnaire by item questions IMSNO1 through IMSNO3 and IMSNE1 through IMSEN3.

3. Control beliefs. Denoted as *Conbelief*. Addressed in the LQ II questionnaire by item questions IMPBCO1 through IMPBCO3 and IMPBCE1 through IMPBCE3.

4. Attitude towards the behavior. Denoted as *Attbeh*. Addressed in the LQ II questionnaire by item questions DMAE1, DMAE2, DMAO1, DMAI1, and DMAI2.

5. Subjective norms. Denoted as *Subnorm*. Addressed in the LQ II questionnaire by item questions DMSN1 through DMSN5.

6. Perceived behavioral control. Denoted as *Perbeh*. Addressed in the LQ II questionnaire by item questions DMPBCSE1, DMPBCSE2, DMPBCC1, DMPBCC2.

7. Intention. Denoted as *Int*. Addressed in the LQ II questionnaire by item questions DMI1 through DMI3.

8. Subordinate’s perception of leader’s attitude towards referent values. Denoted as *Subatt*. Addressed in the LQ III questionnaire by item questions ARVS1 through ARVS17.

9. Leader’s attitude towards referent values. Denoted as *Leadatt*. Addressed in the LQ I by item questions ARV1 through ARV17.

10. Use of spiritual values to drive performance (actual behavior). Denoted as *Userv*. Addressed in the LQ I by item questions AB1 through AB3.
11. Subordinate’s perception of leader’s use of referent values. Denoted as Subuserv. Addressed in the LQ III by item questions ABS1 through ABS3.

Data Analysis

Data collection was stopped once a priori calculations for the desired effect size ($r = .3$) was reached. The subsample ($n$) for the LQ I, LQ II, and LQ III were 140, 99, and 171 respectively. After consolidating the data, eliminating incomplete responses and forming the matched pairs, the sample ($N$) for the study was 105 matched pairs. The actual effect size was $r = .30$, $\alpha = .05$, and $\beta = .95$. The final data was loaded into a Lisrel file for the analysis presented in Chapter 4.

The frequency counts and percentages of demographic variables are presented in Tables 1 through 4. Table 1 shows that among a total of 105 leader-subordinate pairs surveyed, 35 participants (33.3%) were from U.S based firms, 23 participants (21.9%) were from local corporations, 4 participants (3.8%) were from government public corporations, 4 participants (3.8%) were from government agencies; 3 participants (2.9%) were from non incorporated business, 27 participants (25.7%) were from municipal governments, and 9 participants (8.6%) were from other kind of organization.

Table 1

*Frequency Counts and Percentages by Business Types*

<table>
<thead>
<tr>
<th>Business Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Based Corporation</td>
<td>35</td>
<td>33.3</td>
</tr>
<tr>
<td>Local Corporation</td>
<td>23</td>
<td>21.9</td>
</tr>
<tr>
<td>Government Public Corporation</td>
<td>4</td>
<td>3.8</td>
</tr>
</tbody>
</table>
Table 2 shows that among the 105 leader-subordinate pairs, 74 pairs (70.5%) were from profit corporations and 30 pairs (29.5%) of them were from nonprofit corporations. One leader-subordinate pair did not claim company status.

Table 2

*Frequency Counts and Percentages by Business Classification*

<table>
<thead>
<tr>
<th>Business Classification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>74</td>
<td>70.5</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>30</td>
<td>29.5</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>99.0</td>
</tr>
</tbody>
</table>

Table 3 shows that among 105 leader-subordinate pairs, 51 pairs (50.5%) were males and 50 pairs were females (49.5%); one leader did not claim the status of their company.
Table 3

*Frequency Counts and Percentages by Gender*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>52</td>
<td>49.5</td>
</tr>
<tr>
<td>Female</td>
<td>53</td>
<td>50.5</td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The mean and standard deviation of construct variables are presented in Table 4 and Table 5. It shows that all construct variables were normally distributed or close to a normal distribution. All skew values fell within or close to the acceptable range of -1 to +1. The skewness of individual measurements was also evaluated and the results also showed that the individual measurements follow a normal distribution or close to a normal distribution (data not shown). This implies that the data is appropriate for Structural Equation Modeling analysis and the use of parametric statistics.

Table 4

*Descriptive Statistics for Indirect Measurements Constructs*

<table>
<thead>
<tr>
<th>Construct</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behbelief</td>
<td>102</td>
<td>-10</td>
<td>105</td>
<td>79.68</td>
<td>26.22</td>
<td>-1.132</td>
</tr>
<tr>
<td>Norbelief</td>
<td>102</td>
<td>-15</td>
<td>63</td>
<td>26.21</td>
<td>16.71</td>
<td>-.032</td>
</tr>
<tr>
<td>Conbelief</td>
<td>102</td>
<td>-10</td>
<td>46</td>
<td>21.33</td>
<td>12.08</td>
<td>-.457</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

*Descriptive Statistics for Direct Measurements Constructs*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attbh</td>
<td>102</td>
<td>6.14</td>
<td>1.01</td>
<td>-1.30</td>
</tr>
<tr>
<td>Subnorm</td>
<td>102</td>
<td>5.11</td>
<td>.85</td>
<td>- .62</td>
</tr>
<tr>
<td>Perbeh</td>
<td>102</td>
<td>4.75</td>
<td>.93</td>
<td>- .39</td>
</tr>
<tr>
<td>Int</td>
<td>102</td>
<td>6.15</td>
<td>1.04</td>
<td>-1.17</td>
</tr>
<tr>
<td>Leadatt</td>
<td>105</td>
<td>6.02</td>
<td>.65</td>
<td>- .62</td>
</tr>
<tr>
<td>Subatt</td>
<td>101</td>
<td>5.91</td>
<td>.92</td>
<td>-1.29</td>
</tr>
<tr>
<td>Userv</td>
<td>105</td>
<td>5.97</td>
<td>.86</td>
<td>-1.61</td>
</tr>
<tr>
<td>Subuserv</td>
<td>101</td>
<td>5.79</td>
<td>1.06</td>
<td>-1.16</td>
</tr>
<tr>
<td>Valid N</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation of Test Reliability and Validity

The use of Francis et al. (2004) design guidelines allowed for reliable construction of direct and indirect measures using items that had been demonstrated to have internal consistency. The guidelines minimized reliability testing prior to data collection.

Chronbach’s alpha was used as a measure of reliability for the specific model shown in Appendix C. Test-retest reliability was done for indirect measures in the model gathered in the elicitation study.

The current study required that indirect measures be constructed from participants’ beliefs gathered through an elicitation study. Because indirect measures reflect both
positive and negative beliefs about the same behavior, Francis et al. (2004) recommend using a test-retest technique as a measure of reliability. As recommended by Francis et al., five participants were chosen to assess wording of items, accuracy, ease of understanding, and test-retest reliability of all indirect measures prior to full scale data collection. Francis et al guidelines specify the proper wording and the type and number of items that need to be used in order to measure the different constructs within the theory of planned behavior in a reliable manner. The specific type of behavior is added to all pre-constructed items in the instrument as shown in Appendix D. Chronbach’s alpha values shown in Table 6 reflected moderate (0.50 – 0.69) to high reliability (0.80 – 0.99) across all indirect measures (IMAO-1 through IMPBCE-3). Francis et al. suggests that Cronbach alpha coefficients larger than .60 represent an acceptable criterion for internal consistency.

As a precautionary measure, internal consistency was evaluated for direct measures (DMAE-1 – through DMI-3) on these five participants to capture any unforeseen mistakes in item construction. Direct measures reflected high reliability (0.75 - 0.99) as shown in Table 6. Test-retest results implied that the LQII questionnaire, which had all the indirect measures, was properly constructed according to Francis et al. (2004) design guidelines. It also warranted data collection from the sample population by minimizing the possibility of low internal consistency in post hoc analysis.

Table 6

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAO-1</td>
<td>Behbelief</td>
<td>.66</td>
</tr>
<tr>
<td>IMAO-2</td>
<td>Behbelief</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>Belief</td>
<td>Value</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>IMAO-3</td>
<td>Behbeh</td>
<td>.98</td>
</tr>
<tr>
<td>IMAO-4</td>
<td>Behbeh</td>
<td>.80</td>
</tr>
<tr>
<td>IMAO-5</td>
<td>Behbeh</td>
<td>.56</td>
</tr>
<tr>
<td>IMAE-1</td>
<td>Behbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMAE-2</td>
<td>Behbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMAE-3</td>
<td>Behbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMAE-4</td>
<td>Behbeh</td>
<td>.68</td>
</tr>
<tr>
<td>IMAE-5</td>
<td>Behbeh</td>
<td>.61</td>
</tr>
<tr>
<td>IMSNO-1</td>
<td>Norbeh</td>
<td>.96</td>
</tr>
<tr>
<td>IMSNO-2</td>
<td>Norbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMSNO-3</td>
<td>Norbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMSNE-1</td>
<td>Norbeh</td>
<td>.87</td>
</tr>
<tr>
<td>IMSNE-2</td>
<td>Norbeh</td>
<td>.96</td>
</tr>
<tr>
<td>IMSNE-3</td>
<td>Norbeh</td>
<td>.95</td>
</tr>
<tr>
<td>IMPBCO-1</td>
<td>Conbeh</td>
<td>.96</td>
</tr>
<tr>
<td>IMPBCO-2</td>
<td>Conbeh</td>
<td>.61</td>
</tr>
<tr>
<td>IMPBCO-3</td>
<td>Conbeh</td>
<td>.67</td>
</tr>
<tr>
<td>IMPBCE-1</td>
<td>Conbeh</td>
<td>.91</td>
</tr>
<tr>
<td>IMPBCE-2</td>
<td>Conbeh</td>
<td>.99</td>
</tr>
<tr>
<td>IMPBCE-3</td>
<td>Conbeh</td>
<td>.98</td>
</tr>
<tr>
<td>DMAE-1</td>
<td>Attbeh</td>
<td>.99</td>
</tr>
<tr>
<td>DMAE-2</td>
<td>Attbeh</td>
<td>.99</td>
</tr>
<tr>
<td>DMAO-1</td>
<td>Attbeh</td>
<td>.93</td>
</tr>
<tr>
<td>Construct</td>
<td>Variable</td>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>DMAO-2</td>
<td>Attbeh</td>
<td>.75</td>
</tr>
<tr>
<td>DMSN-1</td>
<td>Subnorm</td>
<td>.98</td>
</tr>
<tr>
<td>DMSN-2</td>
<td>Subnorm</td>
<td>.99</td>
</tr>
<tr>
<td>DMSN-3</td>
<td>Subnorm</td>
<td>.98</td>
</tr>
<tr>
<td>DMSN-4</td>
<td>Subnorm</td>
<td>.80</td>
</tr>
<tr>
<td>DMSN-5</td>
<td>Subnorm</td>
<td>.96</td>
</tr>
<tr>
<td>DMPBCSE-1</td>
<td>Perbeh</td>
<td>.97</td>
</tr>
<tr>
<td>DMPBCSE-2</td>
<td>Perbeh</td>
<td>.99</td>
</tr>
<tr>
<td>DMPBCC-1</td>
<td>Perbeh</td>
<td>.99</td>
</tr>
<tr>
<td>DMPBCC-2</td>
<td>Perbeh</td>
<td>.93</td>
</tr>
<tr>
<td>DMI-1</td>
<td>Int</td>
<td>.98</td>
</tr>
<tr>
<td>DMI-2</td>
<td>Int</td>
<td>.98</td>
</tr>
<tr>
<td>DMI-3</td>
<td>Int</td>
<td>.95</td>
</tr>
</tbody>
</table>

Post hoc analysis in Table 7 demonstrated that constructs Behbelief, Int, Subatt, Leadatt, Userv, and Subuserv had a Cronbach’s alpha value larger than 0.80, which is an indicator of internal consistency reliability. The Cronbach’s alpha of construct Attbeh was 0.79, an indicator of satisfactory level of reliability (Francis et al., 2004). In addition, the construct Norbelief had a Cronbach’s alpha of 0.59, an indicator of moderate internal consistence. Cronbach’s alpha for constructs, Conbelief, Subnorm, and Perbeh were lower than 0.50, which implies those constructs had lower internal consistency.

According to Onwuegbuzie (2000), internal validity is described as the condition that observed differences on the dependent variable are a direct result of the independent
variable and not other unknown variable. External validity is described as the extent to which results from the study can be generalized across populations, settings, and times. The internal validity threats that affected the current study were: instrumentation, matching bias, and reactive arrangements. The external validity threats were: population validity, ecological validity, temporal validity, reactive arrangements, matching bias and specificity of variables. Several measures were taken to minimize some of these threats as shown in Appendix L. The recommendations and guidelines provided in Ajzen’s (2005) and Francis et al. (2004) avoided common validity pitfalls such as: item construction, scale development, format, and length. These recommendations were also followed on those items with different scaling options or expectancy-value measures.

The use of SEM as a data analysis technique allowed the use statistical methods to test the internal validity of the instrument (Hankins et al, 2000). The path coefficients provided by SEM was used to correlate the scores of the instrument to the specific outcome—the use of referent values (independent variable reliability). Internal validity was tested by analyzing SEM coefficients in the equations between dependant and independent variables finding significant and strong correlations between the constructs of perceived behavioral control and intention, and between actual behavior and the leader’s attitude towards spiritual values (Table 8 and Appendix M). Construct validity was tested with the path coefficients to corroborate that the scores to items are related in a manner consistent with the relationships established for the independent and independent variables in the TPB.
Table 7

Internal Consistency Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Item N</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behbelief</td>
<td>9</td>
<td>.86</td>
</tr>
<tr>
<td>Norbelief</td>
<td>6</td>
<td>.59</td>
</tr>
<tr>
<td>Conbelief</td>
<td>6</td>
<td>.09</td>
</tr>
<tr>
<td>Attbeh</td>
<td>5</td>
<td>.79</td>
</tr>
<tr>
<td>Subnorm</td>
<td>5</td>
<td>.20</td>
</tr>
<tr>
<td>Perbeh</td>
<td>3</td>
<td>.35</td>
</tr>
<tr>
<td>Int</td>
<td>3</td>
<td>.85</td>
</tr>
<tr>
<td>Subatt</td>
<td>17</td>
<td>.94</td>
</tr>
<tr>
<td>Leadatt</td>
<td>17</td>
<td>.88</td>
</tr>
<tr>
<td>Userv</td>
<td>3</td>
<td>.80</td>
</tr>
<tr>
<td>Subuserv</td>
<td>3</td>
<td>.89</td>
</tr>
</tbody>
</table>

Research Hypotheses Testing

Structural equation modeling techniques were employed to test the hypotheses in this correlational study according to the proposed relationships between dependent and independent variables. Figure 2 showed the path coefficient values for the constructs analyzed.
The first research hypothesis was as follows:

\( H_{10} \): There is no correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H_{1A} \): There is a correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

The results from structural equation modeling were presented in Table 8 and Appendix M. The results in Table 8 showed that the attitude (\( \text{Attbeh}, M = 6.41, SD = 1.01 \)) was positively associated with the intention (\( \text{Int}, M = 6.15, SD = 1.04 \)) with \( B = .12 \). Subjective norms (\( \text{Subnorm}, M = 5.11, SD = .85 \)) were negatively associated with intention (\( \text{Int} \)) with \( B = -0.04 \). Both the associations between attitude (\( \text{Attbeh} \)) and intention (\( \text{Int} \)), and subjective norms (\( \text{Subnorm} \)) and intention (\( \text{Int} \)), did not reach the significance level with \( p > .05 \).
Table 8  
*Structural Equations Among Construct Variables (endogenous latent variables)*

| Equation | Coefficients | R²  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subatt = 0.06*Leadatt, ( R² = 0.0040 )</td>
<td>(0.10)(^a)</td>
<td>0.60(^b)</td>
</tr>
<tr>
<td>Subuserv = 0.03*Userv - 0.18Int, ( R² = 0.033 )</td>
<td>(0.11)(^a) (0.10)(^a)</td>
<td>0.32(^b) -1.72(^b)</td>
</tr>
<tr>
<td>Userv = 0.14*Int, ( R² = 0.67 )</td>
<td>0.10(^a)</td>
<td>1.50(^b)</td>
</tr>
<tr>
<td>Int = 0.12<em>Attbeh - 0.04</em>Subnorm + 1.09*Perbeh, ( R² = 1.04 )</td>
<td>(0.12)(^a) (0.04)(^a) (0.18)(^a)</td>
<td>0.87(^b) -1.23(^b) 5.92(^b)</td>
</tr>
</tbody>
</table>

Note: \( a = SD, b = t\)-value, \( R² = \) Hayduk’s Blocked-Error \( R² \)

Perceived behavioral control (Perbeh, \( M = 4.75, SD = .93 \)) was positively associated with intention (Int) with \( B = 1.09 (SD = 0.18), t (104, 1) = 5.04, \) with \( p < 0.05 \).

This suggests that the leader’s perceived behavioral control not the leader’s attitude towards the behavior and the subjective norms could predict the intention to use spiritual values in the culture to drive organizational performance.

Based on the above data and analysis, hypothesis \( H1_0 \), that there is no correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control
in Puerto Rico, was rejected and the alternative hypothesis was accepted.

The second research hypothesis was as follows:

$H2_0$: There is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

$H2_A$: There is a correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

Regression analysis was conducted through structural equation modeling between intention (Int) and actual behavior (Userv, $M = 5.97$, $SD = .86$). The results from structural equation modeling in Table 8 showed that the leader’s actual behavior (Userv) was positively associated with intention (Int) to use spiritual values in the culture to drive organizational performance with $B = 0.14$ ($SD = 0.10$), $t (104, 1) = 1.50$, with $p > .05$ which did not reach the significance level. As shown in Appendix M, the leader’s attitude towards referent values (Leadatt, $M = 6.02$, $SD =.65$) was positively associated with actual behavior (Userv) with $B = 0.46$ ($SD = 0.11$), $t (104, 1) = 4.00$, with $p < .05$ which reached the significance level. The coefficient value of 0.46 between the leader’s attitude towards referent values (Leadatt) and the leader’s actual behavior (Userv) suggested that the leader’s attitude towards referent values (Leadatt) would predict the leader’s use of referent values to drive performance (Userv). In other words, the intention (Int) to use spiritual values in the culture to drive organizational performance and the leader’s attitude towards referent values (Leadatt) positively affect the actual behavior (Userv) but only the effect from Leader’s attitude towards referent values on the actual behavior (Userv) reached the significance level 0.05. This suggests that the leader’s attitude towards referent values (Leadatt) predicts the leader’s actual behavior (Userv).
The relationship between actual behavior (Userv) and the subordinates’ perceptions of leader’s use of referent values to drive performance (Subuserv, $M = 5.79, SD = 1.06$) was also evaluated. The results in Table 8 showed that there was a positive association between actual behavior (Userv) and the subordinate’s perception of leader’s use of referent values to drive performance (Subuserv) with $B = 0.03 (SD = 0.11)$, $t(104, 1) = .32$, with $p > .05$ which did not reach the significance level. The small value of the coefficient between actual behavior (Userv) and the subordinate’s perception of leader’s use of referent values to drive performance (Subuserv) suggested that the association was very weak and could be neglected. This implies that the leader’s actual behavior (Userv) could not be reflected in the subordinate’s perception of leader’s use of referent values to drive performance (Subuserv).

The subordinate’s perception of the leader’s use of spiritual values (Subuserv) was used as an independent measure of the leader’s behavior. The results in Table 8 showed that there was a negative association between the intention (Int) and the subordinate’s perception of the leader’s use of referent values (Subuserv) with $B = -.018 (SD = 0.10)$, $t(104, 1) = -1.72$, with $p > .05$ which did reach the significance level but with an explained variance too small ($R^2 = .033$) to be taken into consideration. The structural equation modeling results also evidenced that the majority of the factor loadings between variables were statistically significant if a 5% level of significance was used.

Based on the above data and analysis, hypothesis $H2_0$, that there is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico, was rejected and the alternate hypothesis was accepted.
Table 9

*Model Fit Statistics*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2ln(L) for the saturated model</td>
<td>16144.642</td>
</tr>
<tr>
<td>-2ln(L) for the fitted model</td>
<td>19906.455</td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>2758</td>
</tr>
<tr>
<td>Full Information ML Chi-Square</td>
<td>3761.81 (P = 0.0)</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.059</td>
</tr>
<tr>
<td>90 Percent Confidence Interval for RMSEA</td>
<td>(0.054 ; 0.064)</td>
</tr>
<tr>
<td>P-Value for Test of Close Fit (RMSEA &lt; 0.05)</td>
<td>0.0014</td>
</tr>
</tbody>
</table>

From the model fitting test results (Table 9), the RMSEA point estimate of 0.059 indicates that the model had a moderate fit to the data since RMSEA is less than to .08. When looking into the internal consistency for constructs, the Cronbach’s alpha values for control beliefs, subjective norms and perceived belief control were very low. This could be one of the reasons that the proposed model does not fit the data perfectly.

**Summary**

Based on results and findings above, the following conclusions could be reached:

(a) There was a statistically significant, positive association between the intention to use spiritual values in the culture to drive organizational performance and perceived behavioral control which reached the significance level of .05; there was a positive association between the intention to use spiritual values in the culture to drive organizational performance and the attitude, and a negative association between the intention to use spiritual value in the culture to drive organizational performance and
subjective norms. Both the association between the intention and the attitude, and the association between the intention and the subjective norms, did not reach the significance level of 0.05. (b) There was positive association between the actual behavior and the intention to use spiritual values in the culture to drive organization performance in leaders from Puerto Rico but the association did not reach the significance level 0.05. The coefficient value of 0.46 between the leader’s attitude towards referent values and the leader’s actual behavior suggested that the leader’s attitude towards referent values would predict the leader’s use of referent values to drive performance.
CHAPTER 5: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The organizational culture has been considered as a determinant of performance (Fairbairn, 2005; Lynes & Dredge, 2006; Lyon, 2004; Nahm et al., 2004; Trauter, 2006; Yoshimori, 2005). Associated with culture are values, beliefs, behavior patterns, traditions, and norms, which come from the leader (Fry, 2003; Northhouse, 2001; Sarros et al., 2002). As part of the organizational culture, workplace spirituality has been argued to have practical and ethical utility leading to performance in organizations (Fry et al., 2005; Garcia-Zamor, 2003a, 2003b; Giacalone & Jurkiewicz, 2003; Jurkiewicz & Giacalone, 2004; Pfeffer, 2003). If spirituality is an underlying factor in organizational performance mediated by the organization’s culture, and there is a relationship between the leader’s beliefs and organizational culture, then the leader’s spiritual beliefs can be related to organizational values that lead to performance. Defining the paradigm in this area highlights the need for studies to evaluate the potential relationship between the leader’s beliefs around organizational values that lead to actions and organizational performance.

The current study sought to identify, test and predict variables mediating leader behavioral response to spiritual values and its effect on organization performance. Given the subjective nature of the data collected, an explanatory design was chosen. Probability sampling was used and the survey instruments Leader’s Dependent Variable questionnaire (LQ I), the Subordinate’s Dependent Variable Questionnaire (LQ III) and the Leader’s Independent Variable Questionnaire (LQ II) were employed to survey a target population of leaders who belong to one or more of the following: Chamber of Commerce of Puerto
Rico, Puerto Rico Manufacturers Association, and the government agencies listed in the Puerto Rico Government Agencies Directory. Structural equation modeling technique was used to capture the relationships proposed.

Interpretation of Findings

The study measured the leader’s intention, attitudes, subjective norms, and perceived behavior on a set of spiritual values sought to impact organizational performance, and evaluated the relationship between those measurements to address the following research questions: (a) Which TPB variables influence the leader’s intention to use spiritual values as part of the organizational culture to drive organizational performance? (b) Do leaders in Puerto Rico use spiritual values in their organizational culture to drive organizational performance? (c) Can the TPB be used as a predictive model for the use of spiritual values to drive organizational performance?

Chapter 5 addresses these questions through the analysis of raw data presented in Chapter 4. First, the proposed relationships were addressed by analyzing four research hypotheses through quantitative data and interpreting the results. Second, the implications were presented, followed by recommendations for future research. The chapter concludes with a summary.

Research Hypotheses

This section attempts to evaluate the research hypotheses. The analysis is based on the existing conceptual frameworks discussed in the literature review, particularly those pertaining to the theory of planned behavior (Ajzen, 2005). Although there is a great deal of shared material between the three research questions, they are presented in the sequence
in which they are introduced, with the goal of crafting a useful progression of thought that will fully answer the research questions.

Hypothesis one:

\( H_1_0 \): There is no correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

\( H_1_A \): There is a correlation between the leader’s intention to use spiritual values in the organizational culture to drive performance and the leader’s attitude, subjective norms, and perceived behavioral control in Puerto Rico.

The first research question asks which TPB variables influence the leader’s intention to use spiritual values as part of the culture to drive organizational performance. The question was addressed through testing the first hypothesis, which evaluated if the attitude, subjective norms, and perceived behavioral control in leaders from Puerto Rico had impact on the intention to use spiritual values in the culture to drive organizational performance. Structural equation modeling was used to examine these relationships.

The results showed that perceived behavioral control \((B = 1.09, \ SD = 0.18, \ t (104, 1) = 5.04)\) was positively associated with the intention to use spiritual values in the culture to drive organizational performance at significance level of 0.05. The subjective norms and attitudes were negatively and positively associated with the intention to use spiritual values in the culture to drive organizational performance respectively, but the associations did not reach the significance level 0.05. Those results imply that there was no direct impact on the intention to use spiritual values in the culture to drive organizational
performance from the attitude, subjective norms but the direct impact from perceived behavioral control (PBC) in leaders from Puerto Rico.

Ajzen’s (2005) theory of planned behavior is an extension of the theory of reasoned action and establishes as a central tenet the individual’s intention as an antecedent to actual behavior. The theory espouses three types of considerations guiding human action: behavioral beliefs—pertaining to the likely outcomes and evaluation of the behavior, normative beliefs—pertaining to the normative expectations of significant others and the willingness to comply with them, and control beliefs—those factors that may contribute or inhibit the desired behavior and the power ascribed to those factors (Ajzen, 2006). According to Ajzen (2006), behavioral beliefs lead to a favorable or unfavorable attitude towards the behavior, normative beliefs lead to perceived social influence or subjective norms, and control beliefs lead to perceived behavioral control. Antecedents to intention are the attitude, subjective norms, and perceived behavioral control of the individual.

In general, the stronger the intention, the larger the likelihood will be that the behavior will be accomplished. Given actual control over the behavior, individuals will fulfill their intentions when the opportunity arises, thus moving directly to fulfill the desired behavior. “The relative importance of attitude, subjective norm, and perceived behavioral control in the prediction of intention is expected to vary across behaviors and situations” (Ajzen, 1999, p.188). Thus, there will be instances when attitude alone would be sufficient to explain intention, in other situations subjective norm or perceived behavioral control, and still in others intention will be influenced by all three antecedents. Armitage and Conner (2001) meta-analysis demonstrated a weak correlation between
subjective norm and intention as compared to the PBC-intention or the attitude-intention correlation. This weak correlation was attributed to the narrow conceptualization of the normative component in the TPB. The current study indicated that perceived behavioral control but not attitude towards the behavior and the subjective norms was significantly associated with intention positively at significance level .05, which partially supports Ajzen’s theory of planned behavior.

The TPB model espoused that intention towards the behavior to be the proximal determinant of actual behavior. Intention was measured directly by asking respondents to answer three items where the sentence root changed from I expect, I want, and I intend, but the action or observed behavior remained constant (i.e., I expect to use referent values on a daily basis to drive organizational performance). To understand what drives intention the antecedents of attitude, subjective norms, and perceived behavioral control were explored. By understanding how these constructs lead to intention, an organization that wants to use spiritual values to drive performance can obtain valuable information. Attitude, subjective norms, and perceived behavioral control were directly and indirectly measured. Direct measures asked respondents specifically about the behavior. For example, for subjective norms item question DMSN-4 asked respondents to rate on a seven point Likert Type scale; people who are important to me want me to use referent values daily to drive organizational performance. Indirect measures looked at two components: the belief about the behavior and the corresponding positive or negative judgment.

The direct measure of attitude correlated weakly with intention and proved to be not significant in the determination of intention. Attitude was measured with the use of
bipolar adjectives that included instrumental, experiential, and overall items. Instrumental items measured whether the behavior achieved something (useful-worthless), and experiential items how it feels to perform the behavior (pleasant-unpleasant). All three types of items showed significant deviation from the mean. The large variation in overall attitude ($M = 6.14, SD = 1.01$) is an indication that either the leader shared a wide range of beliefs about attitude, that the bipolar adjective scales was not selected appropriately for the behavior in question, or that the use of reverse scoring confused the participants. Nevertheless, the indirect measures of attitude showed a strong correlation with the direct measures of attitude ($B = .66, M = 79.68, SD = 26.22, t(104, 1) = 2.52$). Taking in consideration that the maximum value for the indirect measure of attitude was 105 and the minimum -10, a mean value of 79.68 reflected a strong positive attitude to use spiritual values to drive organizational performance but not significant enough to drive the leader’s intention.

The direct measurement of subjective norms correlated weakly and negatively to intention. Direct measures looked, in general, to the opinions of important people. The negative correlation implies that overall leaders do not feel under social pressure to use spiritual values to drive organizational performance. It also reflected that the more the social pressure the less intention to use spiritual values. One possible explanation could be the fact that the leaders in this survey occupied high-level positions with responsibility over complete department or areas. Customary to these high responsibility jobs is the delegation of sufficient authority to guide and command, hence their perception that important others had not much influence. According to the results, it is possible that leaders that feel influenced by important others sense a decrease in their authority or
power, which could lead to less desire to use spiritual values to drive organizational performance, but this would need to be further studied to be validated.

The indirect measure of subjective norms showed a strong correlation with the direct measures of subjective norms \( (B = 1.9, M = 26.21, SD = 16.71, t (104, 1) = 3.26) \). Indirect measures included injunctive and descriptive items. Injunctive items reflected what important people think a person should do and descriptive items what important people actually do. The overall indirect measure of subjective norms reflected a moderate positive social pressure to use spiritual values daily to drive organizational performance. The injunctive items of the indirect measures of subjective norms reflected a moderate positive pressure (data not shown) from what others think a person should do to use spiritual values daily to drive organizational performance. The descriptive items of the indirect measures of subjective norms reflected a weak to moderate positive pressure (data not shown) from what important people actually do in using spiritual values daily to drive organizational performance. This implies that leaders had a weak to moderate pressure about beliefs that influence social pressure in the use of spiritual values, which correlated significantly with the direct measure of subjective norms but not significantly enough to drive the leader’s intention.

The direct measurement of PBC correlated positively and significantly to intention \( (B = 1.05, SD = .18, t (104, 1) = 5.92) \). PBC looked to the extent a person feels able to act towards using spiritual values to drive performance. PBC was measured with the use of self-efficacy and controllability items. Self-efficacy items measured the level of difficulty and confidence in using spiritual values. Controllability items measured whether using spiritual values was up to the leader and whether factors beyond their control determine
their use. The results implied that leaders had a strong control over the use of spiritual values to drive organizational performance. With regards to self-efficacy, they considered that using spiritual values was not a difficult thing for them to do. They also felt confident about their ability and skills to use them within the organizational context. With regards to controllability, they considered that using spiritual values was up to them, which implies that little to no external factors were important in their determination to use them.

The indirect measurements of PBC showed a strong negative correlation to the direct measure of PBC ($B = -0.97, M = 21.33, SD = 12.08, t(104, 1) = -7.52$). The negative correlation implies that overall leaders have a weak evaluation on their ability to obtain management support, and a weak evaluation on being discouraged by day to day activities. Taking in consideration that the maximum value for the indirect measure of PBC was 46 and the minimum -10, a mean value of 21.33 reflected a moderate level of positive control to use spiritual values daily to drive organizational performance and significant enough to drive the leader’s intention. Further examination of the items that comprise the measure (data not shown) implied that leaders hold a weak positive evaluation on their belief (weak to moderate) that they are likely to obtain support from management in using spiritual values. In essence, they believed that they could obtain management support and felt somewhat good about being able to do so. It also reflected that leaders hold a strong positive evaluation on their belief (moderate to strong) that the more they understand the benefits and ways to use spiritual values the more they feel encouraged to use them. In essence, they believed that better understanding of spiritual values made them easier to use them. Finally, leaders in this study hold a weak positive evaluation on their belief (moderate to strong) of being discouraged by pressure from day to day activities. In
essence, they believed that the pressure from day to day activities did not adversely impact their use of spiritual values.

Hypothesis two:

$H2_0$: There is no correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

$H2_A$: There is a correlation between the leader’s use of spiritual values in the organizational culture to drive performance and the leader’s intention in Puerto Rico.

The second and third research questions ask whether leaders in Puerto Rico use spiritual values in the culture to drive organizational performance and whether the TPB can be used as a predictive model for the use of spiritual values to drive organizational performance. Those questions were addressed through testing research hypothesis two, which evaluated the relationship between the actual behavior and the intention to use spiritual values in the culture to drive organizational performance in leaders from Puerto Rico.

The results from structural equation modeling revealed that the leader’s actual behavior was positively associated with intention to use spiritual values in the culture to drive organizational performance. However, the association did not reach the significance level of 0.05. The leader’s attitude towards referent values ($B = 0.46, SD = 0.11, t (104, 1) = 4.00$) was positively associated with actual behavior at a significance level of 0.05. The intention to use spiritual values in the culture to drive organizational performance and the leader’s attitude towards referent values positively affect the actual behavior but only the effect from the leader’s attitude towards referent values on the actual behavior reached the significance level 0.05.
Atkinson’s (1964) expectancy-value model theory links achievement performance, persistence, and choice to the individual’s expectancy and value beliefs. Eccles and Wigfield (2002) contended that the expectancies and values influence task choice, performance, and persistence. In turn, expectancies and values are influenced by task related beliefs such as perceived competence, perceived task difficulty, individual’s goals, and self-schema. These beliefs are influenced by the perception of attitudes and expectations from relevant others, the individual’s affective memories, and their interpretation of past outcomes.

The transformation of values to behaviors to organizational and individual performance is well documented in the literature within the organizational culture context. Rokeach (1979) asserts that the concept of values can be generalized to individuals, groups, organizations, institutions, countries, and societies (Fitzgerald & Desjardins, 2004). These values are lasting beliefs about end states of existence or generalized modes of conduct providing the means to study organizations as social structures (Rokeach, 1979).

Schein (1992) suggests a levels view of organizational culture. Cultures can be analyzed at the level of artifacts, espoused values, and basic underlying assumptions. Basic underlying assumptions reflect what the individual says with no necessary relationship to what the individual does while espoused values are taken-for-granted beliefs of the organizational culture (Schein, 1992). Espoused values and basic underlying assumptions reflect someone’s personal beliefs. Within the organizational context these culture-shaping values come from the leader (Fry, 2003; Northhouse, 2001; Schein, 1992). The theory of planned behavior (TPB) was designed to predict and explain behavior in
specific contexts addressing cognitive self-regulation within a dispositional approach (Ajzen, 2005). The findings of the current study indicated that the leader’s attitude towards spiritual values was more significant in predicting actual behavior than intention. The results of the current study support literature studies and the hypothesis the current research proposed.

At the theoretical level, the organization that wants to use spiritual values to drive its performance can look at the leader’s intention to do so. What constitutes spiritual values is not clearly defined in the literature. The current study looked at a specific set of values derived from Fry (2003) and Jurkiewicz and Giacalone (2004). Values are useful and serve as guiding principles in people’s lives (Schwartz, 1999). They drive behavior (Rokeach, 1979), including workplace behavior (Schwartz, 1999). The selected values were: benevolence, generativity, humanism, integrity, justice, mutuality, receptivity, respect, responsibility, trust, charisma, idealism, excellence, forgiveness, perseverance, resourcefulness, and positivism (Appendix A).

Some of these values, such as integrity, respect, responsibility, and trust are not associated to spirituality in some of the management literature; others like humanism, receptivity, idealism and forgiveness reflect a common thread to interconnectedness and transcendence, two areas of focus in the workplace spirituality literature. Rokeach (1979) posited that the ultimate purpose of our values, attitudes, beliefs, and behaviors is to maintain and develop our sense of self-worth. Wanting to use these values within the organizational context requires for the leader to know them, but most importantly to attach personal meaning to them.
This correlational study explored whether the leader knew about these values by measuring the attitude towards them. For example, to measure the attitude towards the value of humanism, respondents were asked to rate on a seven point Likert Type scale if they believed that kindness towards others and an orientation to promote the happiness and prosperity of employees and other stockholders within the work context was important for organizational performance. The response from the leaders ($M = 6.02$, $SD = .65$), showed a moderate to strong attitude toward the values in this study. Further analysis explored the relationship between the attitude towards these values and the leader’s actual behavior (Do leaders actually use these values to drive organizational performance?). The results showed a moderate to strong significant correlation ($B = .46$, $SD = .11$, $t (104,1) = 4.00$).

The results did not fully support that, in general, the stronger the intention, the larger the likelihood will be that the behavior will be accomplished. Actual behavior was self-assessed by the leader and independently by his/her subordinate. Both relationships were weakly related to intention and not significant at the 0.05 level. The large variation in intention ($M = 6.15$, $SD = 1.04$) is an indication that the difference between what the leader wants, expects, and intends with regards to the use of spiritual values varied. Close examination of the individual measures reflect the same large variation (data not shown) in all measures of intention. This large variation can be attributed to a series of factors, among them: the sample size, the temporal separation between questionnaires, the relatedness of the terms used to measure intention, or language interpretation.

A larger sample size could decrease the variability in the measures. The temporal separation, which was done to control common methods variance, positively affected the
participants recollection of previous answers related to the actual use of spiritual values. Although Armitage and Conner (2001) showed empirical response consistency between I expect, I want, and I intend items used in the LQ II questionnaire, their relatedness to the average person could be confusing. Finally, participants in this study presumably knew business level English, a premise that was not validated and could lead to incorrect responses. The information generated from the above analysis has important implications for theory as well as future researches; this will be discussed in the next section.

Implications

The findings from this correlational study suggest that convictions about spiritual values, controllability and self-efficacy can strongly influence the leader’s behavior to use spiritual values to drive organizational performance. The leader’s attitudes towards spiritual values were reflected on 17 values derived from Fry (2003) and Jurkiewicz and Giacalone (2004). The strong relationship between the leader’s attitude towards these spiritual values and the observed behavior could support the articulation of strategies to improve performance by capitalizing on workplace spirituality as reflected on the problem statement.

Perceived behavioral control is assessed by self-efficacy and controllability measures. Self-efficacy can be related to how difficult the behavior is to perform and how confident is the respondent to do it, and controllability to direct control over actions and the presence of factors beyond the leader’s control. The significant association between perceived behavioral control and intention suggests that leaders in Puerto Rico could use this sense of control to assert spiritual values in their organization and make them a significant part of their culture. This action by leaders could address the current study’s
problem about the integration of spiritual values into the workplace to improve bottom line performance.

The findings may be used to expand the body of research regarding the leadership constructs. Leadership constructs like transformational leadership, charismatic leadership, leadership behaviors, DePree’s leadership model, and primal leadership share common elements such as: relationships, connectedness, power, influence and individual and organizational transformation (Klenke, 2003). These constructs rely on the leader and interaction with followers as the principal vehicle for instilling values into the organization. Given the lack of research in this area, the current study is significant because it addresses research pertaining to the moderating variables of workplace spirituality and the leader’s beliefs on spiritual values.

In addition, this study sought to identify the antecedent variables that mediate between the leader’s actual behavior in using these values and his/her personal beliefs to understand the relationship between spiritual values and performance. It contributed to understanding the interactive effects of personal spiritual leadership values, which are present to some extent in most leaders, with organizational performance. It will also contribute to an understanding of the factors that mediate in a leader’s willingness to use spiritual values that, in turn, have an impact on decision-making ability. Leaders can use spirituality as a moral foundation for actions and decisions that foster genuine tolerance and respect (Thompson, 2004). A review of the literature in Puerto Rico shows that an interest exists for increasing the knowledge and practical applications of management and leadership constructs, and in understanding spiritual diversity and practices (Campesino & Schwartz, 2006). The current study can serve as a bridge to close the gap between the
personal spiritual practices of Puerto Rican citizens and the normative aspects of the country’s organizations. It also supports the integration of three seemingly important constructs that are often treated independently by academics as well as practitioners; namely, spirituality, leadership, and organizational performance.

Limitations and Recommendations

This correlational study is limited in several ways. First, it relies on a self-report elicitation questionnaire to measure the leader’s beliefs from which indirect measures of attitude, subjective norms, and perceived behavioral control measures were derived. The sample for the elicitation study was limited, hence not necessarily reflecting the beliefs of the population. Whenever participants are asked to self-report, environment and social desirability bias can occur, which could affect the participants’ responses by answering items to present a more favorable image (Podsakoff et al., 2003).

This correlational study is also limited by the type of values selected from the literature and the methodology for selecting them. Different criteria for selection could generate a different set of values, thus rendering different results. Another limitation is the sampling frame. Sampling from only the Chamber of Commerce of Puerto Rico, Puerto Rico Manufacturers Association, and the government agencies listed in the Puerto Rico Government Agencies Directory has the potential to be a limiting factor because of the inability to generalize the findings.

Further research into this topic may contribute to the body of knowledge to better understand the relationship between workplace spirituality, cultural values, and organizational performance. This can be achieved by conducting the same study in a different culture so that their results can be compared to the findings of this study. There
are cultural differences even within Latin American countries, related to type of values and the significance attached to them. Another recommendation is to directly measure the elements of organizational performance and comparing them to the use of spiritual values in this study. This can be accomplished by an experimental design with the use of simulation that assesses the type of values that lead to a specific performance outcome. Leaders would select values that are akin to what they believe can produce results (i.e., higher employee productivity), that would get translated to a series of ethical guidelines setting the boundaries for decision-making and subordinate response. The close association between power and controllability has implications on the leader as an exemplary figure in the organization. The use of power to exert influence over the use of spiritual values should be further examined. Another opportunity for future research would be to examine if the 17 values of this study represent a unique value structure as compared to other values structures found in the literature (see Aust, 2004; McDonald & Gandz, 1991; Schwartz, 1999).

There are certain changes that would improve the design methodology of the current study: (a) using a smaller set of values would help the respondent better recollect them in memory, thus avoiding generalizing or oversimplifying their meaning. (b) Avoid the use of words that, although appropriate for the measure, might evoke a similar meaning or understanding on behalf of the respondent. (c) Refresh the list of values and performance measures throughout the LQ II to make them more accessible to the respondent. (d) Use the smallest temporal separation possible that avoids common methods variance but that encourages respondent’s to participate. (e) Conduct and exploratory study as an alternate method to the recommendations in Francis et al. (2004).
Summary

This quantitative correlational study tried to identify, test and predict variables mediating leader behavioral response to spiritual values and its effect on organization performance. It also studied the antecedent variables that mediate between the leader’s actual behavior in using these values and his/her personal beliefs.

The finding of the current study revealed that there was statistically significant, positive association between the intention to use spiritual values in the culture to drive organizational performance and perceived behavioral control. There was statistically significant positive association between the actual use of spiritual values to drive organizational performance in leaders from Puerto Rico and the leader’s attitude towards spiritual values.

The findings may expand the body of research regarding leadership constructs. This study will contribute to understanding the interactive effects of personal spiritual leadership values, which are present to some extent in most leaders, with organizational performance. It will contribute to an understanding of the factors that mediate in a leader’s willingness to use spiritual values that, in turn have an impact in organizational performance.
REFERENCES


type of reasoned action and the theory of planned behaviour. *Psychology and

Harlos, K. P. (2000). Toward a spiritual pedagogy: Meaning, practice, and applications in

Herzberg, F. (1965). The new industrial psychology. *Industrial & Labor Relations

Hill, M., Mann, L., & Wearing, A. J. (1996). The effect of attitude, subjective norm, and
self-efficacy on intention benchmark: A comparison between managers with
experience and no experience in benchmarking. *Journal of Organizational

Hoffman, A. J. (2003). Reconciling professional and personal value systems: The
spiritually motivated manager as organizational entrepreneur. In R. A. Giacalone,
& C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational

cultures: A qualitative and quantitative study across twenty cases. *Administrative
Science Quarterly, 35*(2), 286-316. Retrieved February 7, 2007, from EBSCOhost
database.

Hood, J. N. (2003). The relationship of leadership style and CEO values to ethical
January 31, 2007, from EBSCOhost database.


APPENDIX A: REFERENT VALUES

The selection of referent values from those found in Fry (2003), and Jurkiewicz and Giacalone (2004) requires a process of selection and a rationale. Jurkiewicz and Giacalone espouse a set of 10 values defined in terms of degree, from positive to negative. For example, on the positive side, integrity is defined as uncompromising adherence to a code of conduct; sincerity, honesty, candor; exercising unforced power. On the negative side is defined as deceptive behavior from organizational members, expedient, artificial, shallow, politically manipulative, and inconsistent in following a code of conduct.

Fry espouses a set of values, attitudes, and behaviors that are aggregated as spiritual qualities for three basic elements in the spiritual leadership model: vision, altruistic love, and hope/faith. There are a total of 30 terms; 20 qualities suggested by Fry and 10 values suggested by Jurkiewicz and Giacalone. There are three values which are common to both lists of terms: integrity, trust, and benevolence. Benevolence, which is a value in Jurkiewicz and Giacalone’s list, is equated to empathy/compassion on Fry’s list. Some of the terms as defined by Jurkiewicz and Giacalone resemble concepts espoused in Fry’s explanation of the spiritual leadership model. For example, Fry describes the values of responsibility, respect, and mutuality throughout the model’s description.

There are several considerations that bear in the criteria for selecting the list of values to be used in this correlational study:

1. Participants’ interest in reading value definitions.

2. Selection of values that are representative of Fry’s qualities across the model’s elements of vision, altruistic love, and hope/faith.
3. The length of the final list of values selected.

4. Labeling values in a way that are customary to the participants.

5. Selecting definitions that are easily understood.

Because there are three values common to both lists, it is reasonable to add seven representative values from Fry’s list to that of Jurkiewicz and Giacalone. Using the selection criteria spiritual values were selected from both authors. Some selected qualities from Fry were transformed to values. The resulting list added three qualities from the vision element: charisma—broad appeal to key stakeholders, idealistic—reflects high ideals, and excellence—establishes a standard of excellence; one quality from the element of altruistic love: forgiveness; and three qualities from the element of hope/faith: perseverance, resourcefulness—do what it takes, and positivism—expectation of reward/victory.

The resulting list of 17 values is:

1. Benevolence – “Kindness towards others and an orientation to promote the happiness and prosperity of employees and other stakeholders within the work context” (Jurkiewicz & Giacalone, 2004, p. 131).

2. Generativity – “Long-term focus, showing a concern for the consequences of one’s actions into the future; respectful of future generations” (Jurkiewicz & Giacalone, 2004, p. 131).

3. Humanism – “Practices and policies that assert the essential dignity and worth of each employee; provided an opportunity for personal growth in conjunction with organizational goals” (Jurkiewicz & Giacalone, 2004, p. 131).

4. Integrity – “Uncompromising adherence to a code of conduct; sincerity,
honesty, candor; exercising unforced power” (Jurkiewicz & Giacalone, 2004, p. 131).


6. Mutuality – “All employees are interconnected and mutually dependent; each contributes to the final output by working in conjunction with other” (Jurkiewicz & Giacalone, 2004, p. 131).


8. Respect – “Regard and treat employees with esteem and value; showing consideration and concern for others” (Jurkiewicz & Giacalone, 2004, p. 131).

9. Responsibility – “independently follows through on goal attainment irrespective of difficulty or obstacles; concerned with doing what’s right rather than the right thing” (Jurkiewicz & Giacalone, 2004, p. 131).


[Motivates and empowers] individuals to maximize the gains of the organization without regard to personal needs; eliciting higher-order goals (Jaepil, 2006).

12. Idealistic – Reflects high ideals to members of the organization (Fry, 2003).

13. Excellence – Establishing clear standards for the organization to follow (Fry,
2003). Expects, motivates, and rewards those who pursue these clear standards and achieve them.

14. Forgiveness – Allowing for everyone to make reasonable mistakes. Does not take personally other’s faults and encourages everyone to learn from mistakes.

15. Perseverance – Capable of demonstrating resiliency across activities and throughout time.

16. Resourcefulness – Do what it takes to fulfill organizational goals (Fry, 2003). Using creativeness and innovation to help self and others to get the job done.


Categorization of these values can take many forms. A short review of the literature on values (i.e., Abbott et al., 2005; Hood, 2003, McDonald, & Gandz, 1991) reflects some common terminology used. From the surveyed literature the most common terms categorized values as moral, organizational, spiritual, social, competency, and personal. These terms were used in the elicitation part of this correlational study for participants to reflect their personal choices in categorizing this set of referent values.
APPENDIX B: VALUE-EXPECTANCY FORMULATIONS IN THE THEORY OF PLANNED BEHAVIOR

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Mathematical Representation</th>
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<tr>
<td><strong>Attitude</strong></td>
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<tr>
<td></td>
<td>$A = \text{attitude}$</td>
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<td></td>
<td>$b_i = \text{the strength of each behavioral belief}$</td>
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<td></td>
<td>$e_i = \text{subjective evaluation of the beliefs}$</td>
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<tr>
<td></td>
<td>attribute</td>
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<td><strong>Subjective norm</strong></td>
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<tr>
<td></td>
<td>$\text{SN} = \text{subjective norm}$</td>
</tr>
<tr>
<td></td>
<td>$n_i = \text{the strength of each normative belief}$</td>
</tr>
<tr>
<td></td>
<td>$m_i = \text{individual’s motivation to comply with}$</td>
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<td></td>
<td>the referent in question</td>
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<tr>
<td><strong>Perceived behavioral</strong></td>
<td>$\text{PBC} = \sum p_ic_i$</td>
</tr>
<tr>
<td>control</td>
<td>$\text{PBC} = \text{perceived behavioral control}$</td>
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<tr>
<td></td>
<td>$p_i = \text{perceived power of the particular control}$</td>
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<td></td>
<td>factor to facilitate or inhibit performance of</td>
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<td></td>
<td>the behavior</td>
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<td></td>
<td>$c_i = \text{the strength of each control belief}$</td>
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</table>
APPENDIX C: DEPENDENT AND INDEPENDENT VARIABLE DIAGRAM
This diagram demonstrates the relationship between the dependent and independent variables. Shown in this schematic are types of measurements, the level of analysis, and the number of items used for each variable (e.g., D41-D43, where the letter D stands for direct measurement, the letter I for indirect measurement and the letter B for demographic data). The exact number of indirect measurements will be determined through an elicitation study. The number of indirect measurements reflected in this schematic is representative of the minimum number of measurements recommended.
APPENDIX D: THE LEVEL OF SPECIFICITY OF THE DEPENDENT VARIABLE

Ajzen (2006) recommends for the dependent variable to be defined in terms of its target, action, context, and time (TACT). For example, watching movies in the theater every week at the local mall is a behavior defined by the TACT elements. The target is the theater, the action is watching movies, the context is the local mall, and the time is every week. Although defining TACT elements is somewhat arbitrary, Ajzen suggests being considerate to the principles of compatibility, specificity, and generality. The principle of compatibility requires for all predictor variables to be defined exactly to the TACT elements defined in the behavior under investigation. Thus, the attitude compatible with the behavior in the example is the attitude towards watching movies in the theater every week at the local mall.

The TACT elements that define the behavior under investigation can also be adjusted to reflect a more general or specific condition. In our example, watching movies every week is more general than watching movies every week during the evening. In a similar fashion watching movies, is more general that watching movies every week. The same rationale can be applied to the other elements of target, action, and context.

In constructing the measures for the instrument it is important to take into consideration that the TACT elements define the behavior at the theoretical level; they define the latent construct (Ajzen, 2006). Thus, all questions in the questionnaire, including the measure of intention, must refer to the same level of generality or specificity (Francis et al., 2004). The specific behavior under investigation in this correlational study—the dependent variable, was the leader’s use of referent values to drive organizational performance. The target is the referent values, the action is the
leader’s behavior, either articulated or executed, to drive organizational performance, the context is the organization, and the time is on a daily basis. Removing the term spirituality and substituting it for the term referent will tend to decrease participant’s bias, thus reducing CMV effects.
APPENDIX E: RESEARCH PROCESS DIAGRAM

**PHASE I - Preparation**
1. Set unit of analysis and sample size parameters
2. Construct data set of participants (e.g., address, name, telephones)
3. Prepare a code book
4. Select third party to receive questionnaire from participants. Input to code
5. Develop direct measures for the constructs
6. Send consent form and select participants for this phase
7. Obtain modal salient values and beliefs from 25 participants
8. Analyze questions into themes and develop into questions
9. Pilot test salient beliefs on 5 participants to assess expectancy-value items for behavioral, normative, and control beliefs
10. Make necessary adjustments
11. First draft of questionnaire

**PHASE II – Item Development**
12. First draft and select five participants to test for reliability and validity
13. Test instrument’s full-length test reliability and internal consistency using first draft

**Minor changes?**

Yes

**PHASE III – Draft & Reliability**
14. First draft of questionnaire
15. Select five participants to test for reliability and validity
16. Send consent form to sample
17. First part of questionnaire to leaders, complete questionnaire to subordinates
18. Second part of questionnaire to leaders
19. Collect questionnaires at third party
20. Analyze data using SEM and test for validity

**PHASE IV – Data Collection and Analysis**
There are six critical steps in the four phases:

1. Conduct an elicitation study (Appendix F) to obtain modal salient beliefs. Godin and Kog (as cited in Francis et al., 2004) suggest a subset sample of 25 participants for this part of the study. The modal salient beliefs were used to develop the indirect measures of the independent variables.

2. Pilot test indirect measures for the independent variables on a subset sample of 5 participants. Ask from participants for difficulty, comprehension, and clarity in the phrasing of the indirect measures.

3. Pilot test the three questionnaires: one for the leader to assess the independent variables, one for the leader to assess the dependent variable, and one for the subordinate to assess the dependent variable. Francis et al. suggest for the first draft to include the following items: (a) Demographic questions about the sample. (b) Direct measures of the predictor variables using a minimum of 12 items for intention and direct measures of the independent variables. (c) Indirect measures of the independent variables using a minimum of 18 items for indirect measures of the predictor variables; six for each predictor variable.

4. Test the instrument validity and reliability on a subset sample of 5 people as recommended by Francis et al.. A test-retest technique was used to measure reliability with questionnaires sent to the same sub-set sample two weeks apart. In addition, participants in the sub-set will be asked to provide feedback with regards to the following: (a) Ambiguous or difficult to answer questions. (b) Repetitiveness. (c) Instrument’s length. (d) The measures relevance. (e) Formatting or annoying features in the instrument. (f) Possible problems in response endpoints for those participants who
complete the questionnaire too quickly.

5. Administering the instrument to the sample.

6. Collecting and analyzing data.

All questionnaires sent to participants will include a cover letter explaining the questionnaire, steps to be taken, and the purpose intended for that specific step. Prior to submitting any questionnaires proper internal review board approval will be sought from the University of Phoenix.
APPENDIX F: ELICITATION QUESTIONNAIRE

The answers you provide in this correlational study are kept confidential and anonymous. Part I of this correlational study is divided in two sections: Section I asks you to rate a series of statements regarding a set of values, Section II are a series of short questions regarding your opinions and thoughts on these values. Once you have completed both sections I and II please insert the questionnaire in the return envelope and have it mailed. The envelope is stamped with a return address for your convenience. Please do not write your name in any part of this questionnaire or the return envelope.

Thank you for participating in this part of the study.

Example

Many questions make use of rating scales with 7 places; you are to circle the number that best describes your opinion. For example, if you were asked to rate “The Weather in Puerto Rico” on such a scale, the 7 places should be interpreted as follows:

The Weather in Puerto Rico is:

\[ \text{good : } 1 : 2 : 3 : 4 : 5 : 6 : 7 : \text{ bad} \]

If you think that the weather in Puerto Rico is extremely good, then you would circle the number 1, as follows:

The Weather in Puerto Rico is:

\[ \text{good : } 1 : 2 : 3 : 4 : 5 : 6 : 7 : \text{ bad} \]

If you think the weather in Puerto Rico is quite bad, then you would circle the number 6, as follows:

The Weather in Puerto Rico is:

\[ \text{good : } 1 : 2 : 3 : 4 : 5 : 6 : 7 : \text{ bad} \]
If you think the weather in Puerto Rico is slightly good, then you would circle number 3, as follows:

The Weather in Puerto Rico is:


If you think the weather in Puerto Rico is neither good nor bad, then you would circle the number 4, as follows:

The Weather in Puerto Rico is:


In making your ratings, please remember the following points:

- Be sure to answer all items – do not omit any.
- Never circle more than one number on a single scale.

Section I

The following is a list of possible organizational values. Please rate them according to your belief on the importance of that value in supporting organizational performance. By organizational performance we mean profitability, productivity, quality, customer satisfaction, morale, and employee satisfaction. Remember, all your answers are confidential and remain anonymous.

10. Benevolence – Kindness towards others and an orientation to promote the happiness and prosperity of employees and other stakeholders within the work context.

You believe that Benevolence is important for organizational performance not at all: 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much
11. Generativity – Long-term focus, showing a concern for the consequences of one’s actions into the future; respectful of future generations.

You believe that **Generativity** is important for organizational performance

not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

12. Humanism – Practices and policies that assert the essential dignity and worth of each employee; provided an opportunity for personal growth in conjunction with organizational goals.

You believe that **Humanism** is important for organizational performance

not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

13. Integrity – Uncompromising adherence to a code of conduct; sincerity, honesty, candor; exercising unforced power.

You believe that **Integrity** is important for organizational performance

not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

14. Justice – Evenhanded treatment and judgment of employees; impartial, fair, honest; unbiased assignment of reward and punishments.

You believe that **Justice** is important for organizational performance

not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

15. Mutuality – All employees are interconnected and mutually dependent; each
contributes to the final output by working in conjunction with other.

You believe that **Mutuality** is important for organizational performance
not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much


You believe that **Receptivity** is important for organizational performance
not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

17. **Respect** – Regard and treat employees with esteem and value; showing consideration and concern for others.

You believe that **Respect** is important for organizational performance
not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

18. **Responsibility** – Independently follows through on goal attainment irrespective of difficulty or obstacles; concerned with doing what’s right rather than the right thing.

You believe that **Responsibility** is important for organizational performance
not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much

19. **Trust** – Being able to confidently depend on the character and truth of the organization and its representatives.

You believe that **Trust** is important for organizational performance
not at all : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : very much
20. Charisma – Broad appeal to key stakeholders. Motivates and empowers individuals to maximize the gains of the organization without regard to personal needs; eliciting higher-order goals.

You believe that **Charisma** is important for organizational performance not at all : __1__: __2__: __3__: __4__: __5__: __6__: __7__: very much

21. Idealism – Reflects high ideals to members of the organization.

You believe that **Idealism** is important for organizational performance not at all : __1__: __2__: __3__: __4__: __5__: __6__: __7__: very much

22. Excellence – Establishing clear standards for the organization to follow. Expects, motivates, and rewards those who pursue these clear standards and achieve them.

You believe that **Excellence** is important for organizational performance not at all : __1__: __2__: __3__: __4__: __5__: __6__: __7__: very much

23. Forgiveness – Allowing for everyone to make reasonable mistakes. Does not take personally others faults and encourages everyone to learn from mistakes.

You believe that **Forgiveness** is important for organizational performance not at all : __1__: __2__: __3__: __4__: __5__: __6__: __7__: very much

24. Perseverance – Capable of demonstrating resiliency across activities and throughout time.
You believe that **Perseverance** is important for organizational performance
not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

25. Resourcefulness – Do what it takes to fulfill organizational goals. Using creativeness and innovation to help self and others to get the job done.

You believe that **Resourcefulness** is important for organizational performance
not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much


You believe that **Positivism** is important for organizational performance
not at all : 1 : 2 : 3 : 4 : 5 : 6 : 7 : very much

27. Select the description(s) you feel best describes this set of values. Select as many as you feel necessary.

_____ Moral
_____ Organizational
_____ Spiritual
_____ Social
_____ Competency
_____ Personal

Thank you for participating in this part of the study.
Section II

The following questions address specific issues regarding the list of value statements in Section I. To keep it simple, this part of the study will refer to these value statements as referent values. Please be as detailed as possible in answering these questions. Remember, all your answers are confidential and remain anonymous.

28. What you believe are the advantages of using referent values on a daily basis to drive organizational performance?
29. What do you believe are the **disadvantages** of using referent values on a daily basis to drive organizational performance?
30. Is there anything else you associate with using referent values on a daily basis to drive organizational performance?
31. Are there any *individuals or groups who would approve* of you using referent values on a daily basis to drive organizational performance?
32. Are there **any individuals or groups who would disapprove** of you using referent values on a daily basis to drive organizational performance?
33. Are there any other individuals or groups who come to mind when you think about using referent values on a daily basis to drive organizational performance?
34. What **factors or circumstances enable** you to use referent values on a daily basis to drive organizational performance?
35. What **factors or circumstances make it difficult or impossible** to use referent values on a daily basis to drive organizational performance?
36. Are there any other issues that come to mind when you think about using referent values on a daily basis to drive organizational performance?

Thank you for participating in this part of the study
Appendix G: Informed Consent

April 4, 2007

Dear Participant:

I am a student at the University of Phoenix, working towards a Doctoral in Management in Organizational Leadership. The following information is provided to help you decide whether or not you wish to participate in a study dealing with the impact of values in organizational performance. You should be aware that you are free to decide to participate or to withdraw at any time without any effect on you.

Data will be collected using a brief survey that you can respond to anonymously over the Internet. Your participation might involve two or more of these activities: consent to participate, filling out a questionnaire with items which will take approximately 20 minutes to complete, answering brief questions in a pilot study, and providing feedback on the pilot study.

The results from this research will be publicly discussed in a meeting for business leaders to which you will be invited to attend if you so choose. You can also choose to have the results emailed to you. Your name will not be associated with the research findings in any way, and only the researcher will know your identity.

There are no known risks and/or discomforts associated with this correlational study. Although there may be no direct benefit to you, the possible benefit of your participation could impact selection of organizational leaders who will be more prone to use specific values as a means for improving organizational performance and understanding the elements that could promote using these values. The data collected will
be secured within a locked safe for a period of three years. After three years, the data will be shredded using a commercial grade shredder.

I acknowledge and I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. My signature on this form also indicates that I am 18 years old or older and that I give my permission to voluntarily serve as a participant in the study described. If you have any questions before or during the process concerning the research study, you can call Harold Rivera at 787-444-0294, or write an email to harold1214@gmail.com. I will be more than glad to answer them.

________________________________________  ____________
Participant Signature                     Date
APPENDIX H: LEADER’S DEPENDENT VARIABLE QUESTIONNAIRE

LQ-I

1. Consent and Information

Dear Participant:

I am a student at the University of Phoenix, working towards a Doctoral degree in Management in Organizational Leadership. The following information is provided to help you decide whether or not you wish to participate in a study dealing with the impact of values in organizational performance. You should be aware that you are free to decide to participate or to withdraw at any time without any effect on you.

Data will be collected using surveys that you can respond to in confidentiality over the Internet. Your participation might involve two or more of these activities: consent to participate, filling out a questionnaire with items which will take approximately 20 minutes to complete, answering brief questions in a pilot study, and providing feedback on the pilot study. The questionnaires are written in conversational English and only requires for you to read a series of questions and mark those responses that best fit you.

The results from this research will be publicly discussed in a meeting for business leaders to which you will be invited to attend if you so choos. You can also choose to have the results emailed to you. Your name will not be associated with the research findings in any way, and only the researcher will know your identity.

There are no known risks and/or discomforts associated with this study. Although there may be no direct benefit to you, the possible benefit of your participation could impact selection of organizational leaders who will be more prone to use specific values as a means for improving organizational performance and understanding the elements that could promote using those values. The data collected will be secured within a locked safe for a period of three years. After three years, the data will be shredded using a commercial grade shredder.

If you have any questions before or during the process concerning the research study, you can call Harold Rivera at 787-444-0294, or write an email to harold1214@gmail.com. I will be more than glad to answer them.

* 1. I acknowledge and I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. I also acknowledge that I am the intended receiver of this email. By answering "I acknowledge" on this form also indicates that I am 18 years old or older and that I give my permission to voluntarily serve as a participant in the study described.

j. I acknowledge to the above statement
j. I do not acknowledge to the above statement

* 2. Do you have at least one direct report (someone you supervise) in your organization?

j. Yes
j. No
2. Personal and Direct Report Information

Please provide the information required.

3. Would you like to receive a copy of this study’s findings?
   - Yes
   - No

* 4. This study requires for the participation of an employee that reports directly to you. The direct report will be chosen at random from the list of names you provide below.

Please provide a list of all people reporting directly to you (up to 6 direct reports) their emails and phone numbers. If you only have one direct report, please provide their information on the space provided below.

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LQ-I

3. Introduction

The answers you provide in this study are kept confidential and anonymous. This part of the study is divided into three sections: Section I asks a series of demographic questions, Section II asks you to rate a series of value statements, Section III asks you to self-assess your use of these value statements in your organization.

Example

Many questions make use of rating scales with 7 places; you are to circle the number that best describes your opinion. For example, if you were asked to rate “The Weather in Puerto Rico” on such a scale, the 7 places should be interpreted as follows:

The Weather in Puerto Rico is:

good: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : bad

If you think that the weather in Puerto Rico is extremely good, then you would circle the number 1, if you think the weather in Puerto Rico is quite bad, then you would circle the number 6, if you think the weather in Puerto Rico is slightly good, then you would circle the number 3, if you think the weather in Puerto Rico is neither good nor bad, then you would circle the number 4.

In making your ratings, please remember to answer all items – do not omit any.

Thank you for participating in this part of the study.
LQ-I

4. Section I-Demographic Questions

The following is a short list of demographic questions. Please mark the appropriate answer or provide the requested information. Remember, all your answers are confidential and remain anonymous.

5. Provide an email address were we can communicate with you regarding this study and your mobile phone number.

This information is confidential and will be used for tracking purposes only. (B01)

Email: ____________________________
Mobile: ____________________________

6. Provide the address where you would like the findings of the study sent to you. (B0)

Company: ____________________________
Address 1: ____________________________
Address 2: ____________________________
City: ____________________________
State: ____________________________
Zip Code: ____________________________
Phone No: ____________________________

7. What type of business you work for? (B1)

- U.S. based corporation
- Government Public Corporation
- Government Agency
- A non-incorporated business (own-business)
- Municipal government
- Other (please specify) ____________________________

8. How is your business classified? (B2)

- Profit
- Non for profit

9. What is your gender? (B3)

- Male
- Female

10. What is your age? (enter a whole number only) (B4)

______________________________
**LQ-I**

11. Approximately how many employees work in the company? (B5)

<table>
<thead>
<tr>
<th></th>
<th>2 to 4</th>
<th>5 to 9</th>
<th>10 to 19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 to 49</td>
<td>50 to 99</td>
<td>100 to 248</td>
</tr>
<tr>
<td></td>
<td>250 to 499</td>
<td>500 or more</td>
<td></td>
</tr>
</tbody>
</table>

12. Approximately how many years have you been working in this organization, regardless of departments or regions? (B6)

<table>
<thead>
<tr>
<th></th>
<th>1 to 3</th>
<th>4 to 7</th>
<th>8 to 12</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>13 to 17</td>
<td>18 or more</td>
<td></td>
</tr>
</tbody>
</table>

13. Approximately how many years of work experience you have since you started your first job? (B7)

<table>
<thead>
<tr>
<th></th>
<th>1 to 3 years</th>
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<tr>
<td></td>
<td>4 to 7 years</td>
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<tr>
<td></td>
<td>8 to 12 years</td>
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<tr>
<td></td>
<td>13 to 17 years</td>
</tr>
<tr>
<td></td>
<td>18 years of more</td>
</tr>
</tbody>
</table>

*14. Does the business you work for have a set of organizational values? (some organizational values are formally written and communicated others are not; they are passed down by word of mouth) (EV 1)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
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<tbody>
<tr>
<td></td>
<td>No</td>
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</table>
LQ-I

5. Organizations with values-Demographic Questions

15. To what extent you believe are these values important in driving organizational performance? By organizational performance we mean any of the following: Profitability, Productivity, Customer Satisfaction, Morale, Employee Satisfaction. (EV-2)

<table>
<thead>
<tr>
<th>To so extent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>To a great extent</th>
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<tbody>
<tr>
<td>Choose one</td>
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</table>

16. To what extent your superior uses these values in doing his/her work? If you are your own boss, to what extent you use these values in doing your work? (EV-3)

<table>
<thead>
<tr>
<th>To so extent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>To a great extent</th>
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</table>
6. Section II-Value Statements

The following is a list of possible organizational value statements. Please rate them according to your belief on the importance of that statement in supporting organizational performance. By organizational performance we mean any of the following:

- Profitability
- Productivity
- Customer Satisfaction,
- Morale
- Employee Satisfaction.

Remember, all your answers are confidential and remain anonymous.

17. Kindness towards others and an orientation to promote the happiness and prosperity of employees and other stakeholders within the work context. (ARV 1)

You believe this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very much</th>
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<td>j</td>
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<td>j</td>
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<td>j</td>
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</tbody>
</table>

18. Long-term focus, showing concern for the consequences of one’s actions into the future; respectful of future generations. (ARV 2)

You believe this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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19. Practices policies that assert the essential dignity and worth of each employee; provided an opportunity for personal growth in conjunction with organizational goals. (ARV 3)

You believe this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
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20. Uncompromising adherence to a code of conduct; sincerity, honesty, candor, exercising unforced power. (ARV 4)

You believe this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
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21. Even handed treatment and judgment of employees; impartial, fair, honest, unbiased assignment of reward and punishments.  (ARV 5)

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You believe this statement is important for organizational performance.

Choose one: [ ]

22. All employees are interconnected and mutually dependent; each contributes to the final output by working in conjunction with each other.  (ARV 6)

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<th>1</th>
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<th>Very much</th>
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You believe this statement is important for organizational performance.

Choose one: [ ]

23. Open-minded, flexible thinking, orientation towards calculated risk-taking, rewards creativity.  (ARV 7)

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<th>1</th>
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You believe this statement is important for organizational performance.

Choose one: [ ]

24. Regards and treat employees with esteem and value; showing consideration and concern for others.  (ARV 8)

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You believe this statement is important for organizational performance.

Choose one: [ ]

25. Independently follows through on goal attainment irrespective of difficulty or obstacles; concerned with doing what’s right rather than the right thing.  (ARV 9)

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You believe this statement is important for organizational performance.

Choose one: [ ]

26. Being able to confidently depend on the character and truth of the organization and its representatives.  (ARV 10)

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You believe this statement is important for organizational performance.

Choose one: [ ]
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<td>27. Broad appeal to key stakeholders. Motivates and empowers individuals to maximize the gains of the organization without regards to personal needs; eliciting higher order goals. (ARV 11)</td>
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<td>Very much 7</td>
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<td>You believe this statement is important for organizational performance.</td>
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<td>28. Reflects high ideals to members of the organization. (ARV 12)</td>
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<td>You believe this statement is important for organizational performance.</td>
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<td>29. Establishing clear standards for the organization to follow. Expects, motivates, and rewards those who pursue these clear standards and achieves them. (ARV 13)</td>
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<td>You believe this statement is important for organizational performance.</td>
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<td>30. Allowing for everyone to make reasonable mistakes. Does not take personally other’s faults and encourages to learn from mistakes. (ARV 14)</td>
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<td>You believe this statement is important for organizational performance.</td>
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<td>6</td>
<td>Very much 7</td>
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<td>31. Capable of demonstrating resiliency (the ability to recover from failure) across activities and throughout time. (ARV 15)</td>
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<tr>
<td>You believe this statement is important for organizational performance.</td>
<td>Not at all 1</td>
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<td>Very much 7</td>
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<tr>
<td>32. Do what it takes to fulfill organizational goals. Using creativeness and innovation to help self and others to get the job done. (ARV 16)</td>
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</tr>
<tr>
<td>You believe this statement is important for organizational performance.</td>
<td>Not at all 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>Very much 7</td>
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<td>Choose one</td>
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</table>
LQ-I

33. Expectation of reward/victory. Encourages others to seek reward and victory in an ethical manner. (ARV 17)

You believe this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very much</th>
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<td>Choose one</td>
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</tbody>
</table>

34. Select the description(s) you feel best describes these set of value statements. Select as many as you feel necessary. (DRV 1)

- Moral
- Organizational
- Spiritual
- Social
- Competency
- Personal

Other (please specify)
LQ-I

7. Section III-Actual Behavior

The following questions address specific personal views regarding the use of the value statement you just rated. To keep it simple, THIS PART OR THE STUDY WILL REFER TO THESE VALUE STATEMENTS AS REFERENT VALUES. Please mark or rate them according to your belief on the importance of these referent values in supporting organizational performance. By organizational performance we mean any of the following:

* Profitability
* Productivity
* Quality
* Customer Satisfaction
* Morale
* Employee Satisfaction

The REFERENT VALUES you rated are:

Benevolence, Generativity (respect for future generations), Humanism, Integrity, Justice, Mutuality (interconnected to each other), Receptivity, Respect, Responsibility, Trust, Charisma, Idealism, Excellence, Forgiveness, Perseverance, Resourcefulness, and Positivism

Remember, all your answers are confidential and remain anonymous.

35. In the course of the PAST MONTH, how often have you used referent values daily to drive organizational performance? (AB 1)

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>Almost every day</th>
<th>Most days</th>
<th>On about half the days</th>
<th>A number of times, but less than half</th>
<th>A few times</th>
<th>Never</th>
</tr>
</thead>
</table>

36. In the course of the PAST YEAR, how often have you used referent values daily to drive organizational performance? (AB 2)

<table>
<thead>
<tr>
<th>Never 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Every day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LQ-I

37. How many of these referent values do you use on a routine basis to drive organizational performance? (AB 3)
   j. All of them
   j. Almost all of them
   j. Most of them
   j. About half of them
   j. Some of them, but less than half
   j. A few of them
   j. None of them
8. Thank You

Thank you for taking the time and showing interest. If you have questions regarding this study please contact Harold Rivera at (787) 444-0294 or write an email to harold1214@gmail.com.

Note: If you were taken here from the first page is because this study requires that you have at least one person under your supervision.
APPENDIX I: SUBORDINATE’S DEPENDENT VARIABLE QUESTIONNAIRE

<table>
<thead>
<tr>
<th>LQ-III</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Consent</strong></td>
</tr>
</tbody>
</table>

Dear Participant:

I am a student at the University of Phoenix, working towards a Doctoral degree in Management in Organizational Leadership. The following information is provided to help you decide whether or not you wish to participate in a study dealing with the impact of values in organizational performance. You should be aware that you are free to decide to participate or to withdraw at any time without any effect on you.

Data will be collected using surveys that you can respond to in confidentiality over the Internet. Your participation might involve two or more of these activities: consent to participate, filling out a questionnaire with items which will take approximately 20 minutes to complete, answering brief questions in a pilot study, and providing feedback on the pilot study. The questionnaires are written in conversational English and only requires for you to read a series of questions and mark those responses that best fit you.

The results from this research will be publicly discussed in a meeting for business leaders to which you will be invited to attend if you so choose. You can also choose to have the results emailed to you. Your name will not be associated with the research findings in any way, and only the researcher will know your identity.

There are no known risks and/or discomforts associated with this study. Although there may be no direct benefit to you, the possible benefit of your participation could impact selection of organizational leaders who will be more prone to use specific values as a means for improving organizational performance and understanding the elements that could promote using these values. The data collected will be secured within a locked safe for a period of three years. After three years, the data will be shredded using a commercial grade shredder.

If you have any questions before or during the process concerning the research study, you can call Harold Rivera at 787-444-0294, or write an email to harold1214@gmail.com. I will be more than glad to answer them.

1. I acknowledge and I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. I also acknowledge that I am the intended receiver of this email. By answering "I acknowledge" on this form also indicates that I am 18 years old or older and that I give my permission to voluntarily serve as a participant in the study described.

   j) I acknowledge to the above statement
   j) I do not acknowledge to the above statement
2. Introduction

The answers you provide in this study are kept confidential and anonymous. The answers you marked are in reference to your immediate supervisor and your opinion about his/her beliefs and actions. Section I asks a series of demographic questions. Section II asks you to rate a series of value statements. Section III asks you to rate these value statements in terms of a series of adjectives. Section IV asks you to assess the actual use of these value statements by your immediate supervisor. Thank you for participating in this part of the study.

Example

Many questions make use of rating scales with 7 places; you are to circle the number that best describes your opinion. For example, if you were asked to rate "The Weather in Puerto Rico" on such a scale, the 7 places should be interpreted as follows:

The Weather in Puerto Rico is:

good: __1__ __2__ __3__ __4__ __5__ __6__ __7__: bad

If you think that the weather in Puerto Rico is extremely good, then you would circle the number 1, if you think the weather in Puerto Rico is quite bad, then you would circle the number 6, if you think the weather in Puerto Rico is slightly good, then you would circle the number 3, if you think the weather in Puerto Rico is neither good nor bad, then you would circle the number 4.

In making your ratings, please remember to answer all items - do not omit any.

Thank you for participating in this part of the study.
3. Section I-Demographic Questions

The following is a short list of demographic questions. Please mark the appropriate answer or provide the requested information. Remember, all your answers are confidential and remain anonymous.

∗ 2. What is your name? (This information is confidential and will remain anonymous in the study. It will only be used for follow-up, if necessary.)

3. What is your gender? (BS3)

- Male
- Female

4. What is your age? (enter a whole number only) (BS4)

5. Approximately how many years have you been working in this organization, regardless of departments or regions? (BS5)

- 1 to 3
- 4 to 7
- 8 to 13
- 13 to 17
- 18 or more

6. Approximately how many years of work experience you have since you started your first job? (BS6)

- 1 to 3 years
- 4 to 7 years
- 8 to 12 years
- 13 to 17 years
- 18 years or more

7. Does the business you work for have a set of organizational values? (some organizational values are formally written and communicated others are not; they are passed down by word of mouth) (EVS1)

- Yes
- No
LQ-III

4. Organizations with values-Demographic Questions

8. To what extent you believe are these values important in driving organizational performance? (EVS2)

<table>
<thead>
<tr>
<th>To a great extent</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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<tbody>
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</tbody>
</table>

9. To what extent your superior uses these values in doing his/her work? (EVS3)

<table>
<thead>
<tr>
<th>To a great extent</th>
<th>7</th>
<th>6</th>
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<th>4</th>
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</tbody>
</table>
5. Section II-Value Statements

The following statements address specific personal views regarding the use of these values by YOUR IMMEDIATE SUPERVISOR. The following is a list of possible organizational value statements. Please rate them according to your belief on the importance your immediate supervisor places in these value statements supporting organizational performance. By organizational performance we mean any of the following:
* Profitability
* Productivity
* Customer Satisfaction,
* Morale
* Employee Satisfaction.

Remember, all your answers are confidential and remain anonymous.

10. Kindness towards others and an orientation to promote the happiness and prosperity of employees and other stakeholders within the work context. (ARVS1)

Your immediate supervisor believes this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</table>

11. Long-term focus, showing concern for the consequences of one's actions into the future; respectful of future generations. (ARVS2)

Your immediate supervisor believes this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
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<th>4</th>
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</table>

12. Practices policies that assert the essential dignity and worth of each employee; provided an opportunity for personal growth in conjunction with organizational goals. (ARVS3)

Your immediate supervisor believes this statement is important for organizational performance.

<table>
<thead>
<tr>
<th>Not at all</th>
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<th>2</th>
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13. Uncompromising adherence to a code of conduct; sincerity, honesty, candor, exercising unforced power. (ARVS4)

Your immediate supervisor believes this statement is important for organizational performance.

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<tr>
<th>Not at all</th>
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</table>
14. Even handed treatment and judgment of employees; impartial, fair, honest, unbiased assignment of reward and punishments. (ARVS5)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>Not at all</th>
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15. All employees are interconnected and mutually dependent; each contributes to the final output by working in conjunction with each other. (ARVS6)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>Not at all</th>
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16. Open-minded, flexible thinking, orientation towards calculated risk-taking, rewards creativity. (ARVS7)

Your immediate supervisor believes this statement is important for organizational performance.

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</table>

17. Regards and treat employees with esteem and value; showing consideration and concern for others. (ARVS8)

Your immediate supervisor believes this statement is important for organizational performance.

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18. Independently follows through on goal attainment irrespective of difficulty or obstacles; concerned with doing what’s right rather than the right thing. (ARVS9)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>Not at all</th>
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</table>
19. Being able to confidently depend on the character and truth of the organization and its representatives. (ARVS10)

Your immediate supervisor believes this statement is important for organizational performance.

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<thead>
<tr>
<th>Choose one</th>
<th>Not at all</th>
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<th>Very much</th>
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</table>

20. Broad appeal to key stakeholders. Motivates and empowers individuals to maximize the gains of the organization without regards to personal needs; eliciting higher order goals. (ARVS11)

Your immediate supervisor believes this statement is important for organizational performance.

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<thead>
<tr>
<th>Choose one</th>
<th>Not at all</th>
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<th>Very much</th>
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</table>

21. Reflects high ideals to members of the organization. (ARVS12)

Your immediate supervisor believes this statement is important for organizational performance.

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<tr>
<th>Choose one</th>
<th>Not at all</th>
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<th>Very much</th>
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</table>

22. Establishing clear standards for the organization to follow. Expects, motivates, and rewards those who pursue these clear standards and achieves them. (ARVS13)

Your immediate supervisor believes this statement is important for organizational performance.

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<tr>
<th>Choose one</th>
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<th>Very much</th>
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</table>

23. Allowing for everyone to make reasonable mistakes. Does not take personally other's faults and encourages to learn from mistakes. (ARVS14)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>Choose one</th>
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<th>Very much</th>
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</table>
24. Capable of demonstrating resiliency (the ability to recover from failure) across activities and throughout time. (ARVS15)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>6</th>
<th>Very much 7</th>
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<tr>
<td>Choose one</td>
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<td>J</td>
<td>J</td>
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</table>

25. Do what it takes to fulfill organizational goals. Using creativity and innovation to help self and others to get the job done. (ARVS16)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>6</th>
<th>Very much 7</th>
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26. Expectation of reward/victory. Encourages others to seek reward and victory in an ethical manner. (ARVS17)

Your immediate supervisor believes this statement is important for organizational performance.

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<th>Very much 7</th>
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</table>

27. Select the description(s) your immediate supervisor believes best describes these set of value statements. Select as many as you feel necessary. (DRVS1)

- Moral
- Organizational
- Spiritual
- Social
- Competency
- Personal

Other (please specify)
6. Section III–Actual Behavior

The following questions address specific personal views regarding the use of these value statements by your immediate supervisor. To keep it simple, this part or the study will refer to these value statements as referent values. Please mark or rate them according to your belief on the importance of these referent values in supporting organizational performance. By organizational performance we mean any of the following:

- Profitability
- Productivity
- Quality
- Customer Satisfaction
- Morale
- Employee Satisfaction

Remember, all your answers are confidential and remain anonymous.

28. In the course of the PAST MONTH, how often have you seen your immediate supervisor use referent values on a daily basis to drive organizational performance? (ABS1)

   - Every day
   - Almost every day
   - Most days
   - On about half the days
   - A number of times, but less than half
   - A few times
   - Never

29. In the course of the PAST YEAR, how often your immediate supervisor has used referent values on a daily basis to drive organizational performance? (ABS2)

<table>
<thead>
<tr>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Every day</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

30. How many of these values does your immediate supervisor use on a routine basis to drive organizational performance? (ABS3)

   - All of them
   - Almost all of them
   - Most of them
   - About half of them
   - Some of them, but less than half
   - A few of them
   - None of them
### 7. Thank You

Thank you for taking time to participate in this study.
APPENDIX J: LEADER’S INDEPENDENT VARIABLE QUESTIONNAIRE

LQ-II

1. Introduction

The answers you provide in this study are confidential and anonymous. Section I is a list of the values statements. Section II is a series of questions regarding the value statements. Please read each value statement in Section I and proceed to answer the questions in Section II. To keep it simple, THIS PART OF THE STUDY WILL REFER TO THESE VALUE STATEMENTS AS REFERENT VALUES. Thank you for participating in this study. Example: Many questions make use of rating scales with 7 places; you are to circle the number that best describes your opinion. For example, if you were asked to rate “The weather in Puerto Rico” on such a scale, the 7 places should be interpreted as follows: The weather in Puerto Rico is: good: 1: 2: 3: 4: 5: 6: 7: bad. If you think the weather in Puerto Rico is extremely good, then you would circle the number 1; if you think the weather in Puerto Rico is quite bad, then you would circle the number 6; if you think the weather in Puerto Rico is slightly good, then you would circle the number 3; if you think the weather in Puerto Rico is neither good nor bad, then you would circle the number 4. In making your ratings, please remember to answer all items – do not omit any.
2. Section I

The following is a list of referent value statements addressed in the previous study. Please read them prior to answering the questions in Section II. Part of this questionnaire addresses your ability as a leader to communicate important information. It is recommended to PRINT THIS PAGE TO ANSWER THE QUESTIONS IN SECTION II.

1. **BENEVOLENCE** - Kindness towards others and an orientation to promote the happiness and prosperity of employees and other stakeholders within the work context.

2. **GENERATIVITY** - Long-term focus, showing a concern for the consequences of one’s actions into the future; respectful of future generations.

3. **HUMANISM** - Practices and policies that assert the essential dignity and worth of each employee; provided an opportunity for personal growth in conjunction with organizational goals.

4. **INTEGRITY** - Uncompromising adherence to a code of conduct; sincerity, honesty, candor, exercising unforced power.

5. **JUSTICE** - Even-handed treatment and judgment of employees; impartial, fair, honest; unbiased assignment of reward and punishments.

6. **MUTUALITY** - All employees are interconnected and mutually dependent; each contributes to the final output by working in conjunction with each other.

7. **RECEPTIVITY** - Open-minded, flexible thinking, orientation towards calculated risk-taking, rewards creativity.

8. **RESPECT** - Regards and treats employees with esteem and value; showing consideration and concern for others.

9. **RESPONSIBILITY** - Independently follows through on goal attainment irrespective of difficulty or obstacles; concerned with doing what’s right rather than the right thing.

10. **TRUST** - Being able to confidently depend on the character and truth of the organization and its representatives.

11. **CHARISMA** - Broad appeal to key stakeholders. Motivates and empowers individuals to maximize the gains of the organization without regard to personal needs; eliciting higher-order goals.

12. **IDEALISM** - Reflects high ideals to members of the organization.

13. **EXCELLENCE** - Establishing clear standards for the organization to follow. Expects, motivates, and rewards those who pursue these clear standards and achieve them.

14. **FORGIVENESS** - Allowing for everyone to make reasonable mistakes. Does not take personally other's faults and encourages everyone to learn from mistakes.

15. **PERSEVERANCE** - Capable of demonstrating resiliency across activities throughout time.

16. **RESOURCEFULNESS** - Do what it takes to fulfill organizational goals. Using creativeness and innovation to help self and others get the job done.

17. **POLOVIVISM** - Expectation of reward/victory. Encourages others to seek reward and victory in an ethical manner.
3. Section II Instructions

The following questions address specific personal views regarding these referent values.

You will be asked about what you read here in the next section. You will also be asked to rate questions according to your belief and the importance of the question in supporting organizational performance (OP).

PLEASE READ THIS INSTRUCTIONS TWO TIMES, SLOWLY AND CAREFULLY. PRINT THIS PAGE TO ANSWER QUESTIONS IN SECTION II.

By performance we mean any of the following organizational performance (OP) metrics:

* Profitability * Productivity * Customer Satisfaction, * Morale * Employee Satisfaction*

The REFERENT VALUES you reviewed in the last section are:

* Benevolence * Generativity (respect for future generations) * Humanism *
* Integrity * Justice * Mutuality (interconnected to each other)*
* Receptivity * Respect * Responsibility * Trust *
* Charisma * Idealism * Excellence * Forgiveness *
* Perseverance * Resourcefulness * Positivism *

Remember, all your answers are confidential and remain anonymous.
# LQ-II Phase II

## 2. Section II

You will be asked to rate questions according to your belief and the importance of the question in supporting organizational performance (OP). By performance we mean any of the following organizational performance (OP) metrics:

* Profitability * Productivity * Customer Satisfaction, * Morale * Employee Satisfaction*

### 1. The pressure from my day-to-day activities discourages me to use referent values daily to drive OP. (IMPBCO-3)

<table>
<thead>
<tr>
<th>Unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Likely</th>
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<tr>
<td>Choose one</td>
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### 2. Employees think I: (IMSNE-2)

<table>
<thead>
<tr>
<th>Should Not</th>
<th>-3</th>
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<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Should +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use referent values daily to drive OP</td>
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</table>

### 3. People who are important to me use referent values daily to drive OP. (DMSN-5)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly agree</th>
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### 4. Approval from people that have some authority over my actions (i.e., upper management, bank) is important to me. (IMSNO-1)

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<th>Not at all</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very much</th>
</tr>
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### 5. For me to use referent values daily to drive OP is: (DMAE-1)

<table>
<thead>
<tr>
<th>Enjoyable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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### 6. For me to use referent values daily to drive OP is: (DMAE-2)

<table>
<thead>
<tr>
<th>Pleasant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Unpleasant</th>
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</tbody>
</table>

### 7. For me to use referent values daily to drive OP is: (DMAO-1)

<table>
<thead>
<tr>
<th>Good</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
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</tbody>
</table>

### 8. For me to use referent values daily to drive OP is: (DMAI-1)

<table>
<thead>
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<th>Harmful</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. For me to use referent values daily to drive OP is: (DMAI-2)</td>
<td>Good Practice 1 2 3 4 5 6 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bad Practice 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. If I use referent values daily to drive OP my sense of loyalty towards the organization increases. (IMA0-5)</td>
<td>Unlikely 1 2 3 4 5 6 Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dissaprove -3 -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. People that have some authority over my actions (i.e., upper management, bank) would: (IMSNE-1)</td>
<td>Disapprove 3 -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. When their benefits and use are clear, it makes it: (IMPBCE-2)</td>
<td>Much More Difficult -3 -2 -1 0 +1 +2 Much Easier +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dissaprove -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Doing what others in a similar position to mine do (i.e., managers, presidents, owners, directors) is important to me. (IMSNO-3)</td>
<td>Not at all 1 2 3 4 5 Very Much 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dissaprove -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I want to use referent values daily to drive OP. (DMI-2)</td>
<td>Strongly Disagree 1 2 3 4 5 Strongly Agree 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Understanding the benefits and use of referent values daily to drive OP encourages me to use them. (IMPBCO-2)</td>
<td>Unlikely 1 2 3 4 5 Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dissaprove -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. It is difficult to obtain support from others (i.e., like management) to use referent values daily to drive OP. (IMPBCO-1)</td>
<td>Unlikely 1 2 3 4 5 Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dissaprove -2 -1 0 +1 +2 Approve +3</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I expect to use referent values daily to drive OP. (DMI-1)</td>
<td>Strongly Disagree 1 2 3 4 5 Strongly Agree 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Likely 7</td>
<td></td>
<td>jury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### LQ-II Phase II

18. If the referent values are consistent with the values of the organizational culture, I feel encouraged to use them. (IMA0-4)

<table>
<thead>
<tr>
<th>Unlikely 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Likely 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

19. The decision to use referent values daily to drive OP is beyond my control. (DMPBCC-1)

<table>
<thead>
<tr>
<th>Strongly disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

20. To be aligned with organizational values is: (IMAE-4)

<table>
<thead>
<tr>
<th>Extremity</th>
<th>Undesirebe -3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Extremely Desirable +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

21. If I use referent values daily to drive OP it will help me achieve my work goals. (IMAO-1)

<table>
<thead>
<tr>
<th>Unlikely 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Likely 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

22. Those in a similar position to mine (i.e., managers, presidents, owners, directors): (IMSNE-3)

<table>
<thead>
<tr>
<th>Use referent values daily to drive OP</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Do +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

23. When not getting support from others (i.e., like management) I am: (IMBPCE-1)

<table>
<thead>
<tr>
<th>Least Likely -3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>More Likely +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use referent values daily to drive OP</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

24. Being responsible for my actions is: (IMAE-3)

<table>
<thead>
<tr>
<th>Extremity</th>
<th>Undesirebe -3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Extremely Desirable +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

25. Being loyal to my organization is: (IMAE-5)

<table>
<thead>
<tr>
<th>Extremity</th>
<th>Undesirebe -3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Extremely Desirable +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
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<td>j</td>
</tr>
</tbody>
</table>
## LQ-II Phase II

26. I am confident that I could use referent values daily to drive OP if I wanted to. (DMPBCSE-1)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

27. For me to use referent values daily to drive OP is: (DMPBCSE-2)

<table>
<thead>
<tr>
<th>Easy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Difficult</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

28. I feel under social pressure to use referent values daily to drive OP. (DMSN-3)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

29. If I use referent values daily to drive OP I feel more responsible for my actions. (IMAO-3)

<table>
<thead>
<tr>
<th>Unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Likely</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

30. Approval from employees is important to me. (IMSN0-2)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Very Much</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

31. I intend to use referent values daily to drive OP. (DMI-3)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

32. Whether I use referent values daily to drive OP or not is entirely up to me. (DMPBCC-2)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td></td>
</tr>
</tbody>
</table>

33. Achieving my work goals is: (IMAE-1)

<table>
<thead>
<tr>
<th>Extremely Undesirable</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Extremely Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

34. Improving my performance in a team is: (IMAE-2)

<table>
<thead>
<tr>
<th>Extremely Undesirable</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>Extremely Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>
## LQ-II Phase II

### 35. When pressured by my day to day activities, I am: (IMPBCE-3)

<table>
<thead>
<tr>
<th>Loss Likely -3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>More Likely +3</th>
</tr>
</thead>
<tbody>
<tr>
<td>to use referent values daily to drive OP</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

### 36. People who are important to me want me to use referent values daily to drive OP. (DMSN-4)

<table>
<thead>
<tr>
<th>Strongly disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

### 37. Most people who are important to me think that: (DMSN-1)

<table>
<thead>
<tr>
<th>I should 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>I should not 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>use referent values daily to drive OP</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

### 38. If I use referent values daily to drive OP my performance in the team is improved. (IMAO-2)

<table>
<thead>
<tr>
<th>Unlikely 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Likely 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>

### 39. It is expected of me that I use referent values daily to drive OP. (DMSN-2)

<table>
<thead>
<tr>
<th>Strongly disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
<td>j</td>
</tr>
</tbody>
</table>
APPENDIX K: ITEM CONSTRUCTION AND MEASURES

Construction of Questionnaires

A detailed description on the construction of items for these questionnaires is presented in this section and can be found in Appendix K. This section specifies the direct measures for intention, attitude, subjective norms, and PBC. It also describes item construction for the indirect measures of behavioral, normative, and control beliefs. Rationale for selection of specific measures is given and the means to calculate specific average scores from the different items pertaining to a single construct.

Direct measures for intention. Three items were used in the Leader’s Independent Variable Questionnaire (Appendix J) to measure intention. Albeit the conceptual differences between the phrases I expect, I want, and I intend, they have shown considerable response consistency in empirical studies (Armitage & Conner, 2001). Scoring is obtained by calculating the mean of the three intention scores. Intention will be measured with a seven-point scale format as follows:

4. I expect to use referent values on a daily basis to drive organizational performance
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. I want to use referent values on a daily basis to drive organizational performance.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

6. I intend to use referent values on a daily basis to drive organizational performance
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree
Direct measures for attitude. Attitude will be measured in the Leader’s Predictor Variable Questionnaire (Appendix E) using a semantic seven-point differential scale. Developed by Osgood, Suci, and Tannenbaum (as cited in Graeme, 2006), semantic differential scales measure the connotative meaning of concepts. Connotative meaning refers to the emotional association, evaluations, judgments, and individual’s reactions to a concept (Graeme, 2006). Osgood et al. (as cited in Graeme, 2006) suggested that connotative meaning and their associated concepts be evaluated within an evaluative, potency, and activity dimensions. Semantic differential scales are constructed by the use of bipolar adjectives that define meaning for the concept being studied. Evaluative dimensions comprises semantic differentials such as good-bad, potency dimensions use semantic differentials such as strong-weak, and activity dimensions use semantic differentials such as active-passive (Graeme, 2006).

Heise (as cited in Graeme, 2006) postulates that semantic differential scales have been extensively used and tested demonstrating high reliability, validity, and effectiveness. Ajzen (2006) suggests two criteria for semantic differential construction: first, using item-total correlations or reliability measures to select adjective pairs that show high internal consistency, second, to use instrumental and experiential components. Instrumental terms are represented by adjective pairs such as valuable-worthless, and harmful-beneficial, whereas experiential terms are reflected by scales such as pleasant-unpleasant, and enjoyable-unenjoyable. A good-bad scale should also be included as it captures overall evaluation (Ajzen, 2006). The measurement will include negative endpoints as recommended by Francis et al. (2004). Scoring for the direct measurement of attitude will be done by recoding items that were negatively worded so that the
positive attitude is reflected by the higher number in the scale (e.g., for good-bad, an answer of 6 becomes a score of 2; a score of 4 remains a 4). The mean of the item scores will be calculate for an overall attitude score. The direct measures for attitude will be as follows:

For me to use referent values on a daily basis to drive organizational performance is

Harmful 1 2 3 4 5 6 7 Beneficial
Pleasant 1 2 3 4 5 6 7 Unpleasant
Good 1 2 3 4 5 6 7 Bad
The wrong thing to do 1 2 3 4 5 6 7 The right thing to do
Good practice 1 2 3 4 5 6 7 Bad practice

Direct measures for subjective norm. Subjective norm will be measured in the Leader’s Independent Variable Questionnaire (Appendix J) using a seven-point scale. Both injunctive and descriptive items were used as recommended by Ajzen (2006). Injunctive items address the participants perceptions on what relevant others think while descriptive items address what relevant others actually do. Items ending in incomplete sentences will be arranged so that the scales are a mix of positive and negative endpoints. Scoring for the direct measurement of attitude will be done by recoding items that were negatively worded so that high scores consistently reflect greater social pressure (Francis et al., 2004). The mean of the item scores will be calculated for an overall subjective norm score. Direct measures of subjective norm will be measured as follows:
5. Most people who are important to me think that

I should 1 2 3 4 5 6 7 I should not

use referent values on a daily basis to drive organizational performance

6. It is expected of me that I use referent values on a daily basis to drive organizational performance.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

7. I feel under social pressure to use referent values on a daily basis to drive organizational performance.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

8. People who are important to me often use referent values on a daily basis to drive organizational performance.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

_Direct measures for perceived behavioral control._ Perceived behavioral control will be measured in the Leader’s Independent Variable Questionnaire (Appendix J) using a seven-point scale that reflects the participant’s confidence in performing the behavior under consideration. Perceived behavioral control is assessed by the participant’s self-efficacy and their beliefs about the amount of control they have over the behavior under consideration (Francis et al., 2004). Asking participants the degree of difficulty in doing the behavior and their confidence that they can do it assesses self-efficacy. Asking participants whether performing the behavior is up to them and whether factors beyond determine the behavior assesses controllability (Francis et al.). Recoding items that were negatively worded so that high scores consistently reflect greater control to do the target
behavior will reflect scores for the direct measurement of perceived behavioral control (Francis et al.). The mean of the item scores will be calculated for an overall subjective norm score. Direct measures of perceived behavioral control will be measured as follows:

Self-efficacy:
5. I am confident that I could use referent values on a daily basis to drive organizational performance if I wanted to.
   Strongly disagree  1  2  3  4  5  6  7  Strongly agree
6. For me to use referent values on a daily basis to drive organizational performance is.
   Easy  1  2  3  4  5  6  7  Difficult

Controllability:
7. The decision to use referent values on a daily basis to drive organizational performance is beyond my control.
   Strongly disagree  1  2  3  4  5  6  7  Strongly agree
8. Whether I use referent values on a daily basis to drive organizational performance or not is entirely up to me.
   Strongly disagree  1  2  3  4  5  6  7  Strongly agree

*Modal Salient Beliefs.* The elicitation study (Appendix F) will gather the behavioral, normative, and control beliefs to be used in the indirect measures—modal salient beliefs. The questions to be answered by the participants are as follows:

Behavioral beliefs:
4. What do you believe are the advantages of using referent values in the culture to drive organizational performance on a daily basis?
5. What do you believe are the disadvantages of using referent values in the culture to drive organizational performance on a daily basis?

6. Is there anything else you associate with using referent values in the culture to drive organizational performance on a daily basis?

Normative beliefs:

4. Are there any individuals or groups who would approve of you using referent values in the culture to drive organizational performance on a daily basis?

5. Are there any individuals or groups who would disapprove of you using referent values in the culture to drive organizational performance on a daily basis?

6. Are there any other individuals or groups who come to mind when you think about using referent values in the culture to drive organizational performance on a daily basis?

Control beliefs:

4. What factors or circumstances enable you to use referent values in the culture to drive organizational performance on a daily basis?

5. What factors make it difficult or impossible for you to use referent values in the culture to drive organizational performance on a daily basis?

6. Are there any other issues that come to mind when you think about using referent values in the culture to drive organizational performance on a daily basis?

Belief strength and outcome evaluation measures will be constructed from the elicitation study’s modal salient beliefs and pilot tested for clarity and ease of understanding. According to Ajzen (2006), internal consistency is not necessary between the belief composites. The use of unipolar or bipolar scaling for belief strength and
outcome evaluation is a subject of debate in the literature (Ajzen, 2005, 2006). This correlational study will use a mix of unipolar and bipolar scales as suggested by Francis et al. (2004). By having the midpoint represented by a score of zero in a bipolar scale, beliefs marked as such would make no contribution to the behavior under consideration.

Seven point scale and bipolar scale formats were used in the Leader’s Independent Variable Questionnaire (Appendix J) for the indirect measures of attitude, subjective norms, and perceived behavioral.
## APPENDIX L: MEASURES TO INTERNAL AND EXTERNAL VALIDITY

### THREATS

<table>
<thead>
<tr>
<th>Threat</th>
<th>Type</th>
<th>Definition</th>
<th>Measure Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumentation</td>
<td>Internal Validity</td>
<td>Scores yield appropriate level of consistency</td>
<td>Internal consistency measured with Cronbach’s coefficient alpha</td>
</tr>
<tr>
<td>Matching bias</td>
<td>Internal Validity/External Validity</td>
<td>Selection of participants who have similar characteristics</td>
<td>The subordinates participating in this correlational study were picked at random from a list of those subordinates reporting to the leader using a simple random number generator.</td>
</tr>
<tr>
<td>Reactive arrangements</td>
<td>Internal Validity/External Validity</td>
<td>Change in responses as a result of the awareness that participants are part of a study</td>
<td>Participants were notified that participation in this correlational study did not have any direct or immediate consequences in their compensation or work performance appraisal.</td>
</tr>
<tr>
<td>Population validity</td>
<td>External Validity</td>
<td>The extent to which findings are generalized to the target population</td>
<td>This is a measure of the sampling frame strength and the response rate. The sample obtained was not large enough to generalize the findings.</td>
</tr>
<tr>
<td>Ecological validity</td>
<td>External Validity</td>
<td>The extent to which findings are generalized across settings, conditions, variables, and contexts</td>
<td>Cannot be controlled because the beliefs about spiritual values is subject to change across settings, conditions,</td>
</tr>
<tr>
<td>Temporal validity</td>
<td>External Validity</td>
<td>The extent to which findings are generalized across time</td>
<td>Can not be controlled because the beliefs about spiritual values is subject to change across time</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>----------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Specificity of variables</td>
<td>External Validity</td>
<td>The more unique the participants, time, context, conditions, and variables the less generalizable the findings will be</td>
<td>The definition of the dependent variable reflects a level of flexibility that allows its use with other participants across time and under different conditions</td>
</tr>
</tbody>
</table>

This list of internal and external threats was identified using Onwuegbuzie’s (2000) study on internal and external threats to quantitative studies. Other threats mentioned in Onwuegbuzie’s study were not considered appropriate for this correlational study.
### APPENDIX M: STRUCTURAL EQUATIONS BETWEEN CONSTRUCT VARIABLES (ENDOGENOUS LATENT VARIABLES AND ENDogenous OBSERVED VARIABLES)

<table>
<thead>
<tr>
<th></th>
<th>Leadatt</th>
<th>Behbelief</th>
<th>Norbelief</th>
<th>Conbelief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Userv</td>
<td>0.46</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
|      | (0.11)
|      | 4.00    |           |           |           |
| Subuserv| -     | -         | -         | -         |
| Subatt| 0.06    | -         | -         | -         |
|      | (0.10)  |           |           |           |
| Attbeh| -       | 0.63      | -         | -         |
|      | (0.26)  |           |           |           |
| Subnorm| -     | -         | 1.47      | -         |
|      | (0.58)  |           |           |           |
| Perbeh| -       | -         | -         | -0.97     |
|      | (0.13)  |           |           |           |

Note: a = SD, b = t-value