MANAGEMENT THEORY AND SPIRITUALITY:
A FRAMEWORK AND VALIDATION OF THE INDEPENDENT
SPIRITUALITY ASSESSMENT SCALE

A Dissertation

Presented to the
Faculty of Argosy University

In Partial Fulfillment of
The requirements for the Degree of

Doctor of Business Administration

by

Ronald Raymond Rojas

March 2002
ABSTRACT

Abstract of Dissertation Presented to the
Graduate School of Argosy University
In Partial Fulfillment of the Requirements for the
Degree of Doctor of Business Administration

MANAGEMENT THEORY AND SPIRITUALITY:
A FRAMEWORK AND VALIDATION OF THE INDEPENDENT
SPIRITUALITY ASSESSMENT SCALE

by

Ronald Raymond Rojas

March, 2002

Chairperson: Dr. Peter R. Simmons
Committee: Dr. Cal Berkey
Dr. Shanker Menon

Department: Business Administration

The potential for spirituality theory in the management disciplines has generated a large volume of primarily theoretical literature. At the threshold of this newly formed discipline stand the sentinels of field research methodologies. It is within the gap between the excitement of a new field in management theory generating an abundance of theoretical discourse, and a sparse availability of empirical studies characterized by scientific rigor that the present study is conducted.

This study posits that a reliable and valid spirituality scale founded on a relational-ideopraxis construct can be developed to meet the empirical research needs of management theory development in spirituality. The relational-ideopraxis construct is
defined as a way to integrate a worldview (ideology) inclusive of spiritual subjects, into everyday activities (praxis) through an alternative human developmental process framed against relational attributes. The construct consists of thirteen independent variables also known as relational modes, or conforming arrangements of personal behaviors selected as a response to a contextual, relational demand. For each relational mode, three specific behaviors are operationalized into statements and are subject to item validation through panels of experts and then subject to reliability and validity tests. This instrument, called the Independent Spirituality Assessment Scale (iSAS), demonstrated normality ($p = 0.09, n = 234$), homogeneity ($\alpha = 0.88, n = 508$), and stability ($r = 0.92, n = 40$), with an improved $\alpha = 0.91$ after refinements. Construct validity was demonstrated through two control groups, concurrency with two spirituality instruments, namely Howden's © ($r = 0.53, n = 220$), and Beazley's © ($r = 0.31, n = 113$) scales, and factor analysis. These statistical analyses from a population of 508 respondents obtained from seven major metropolitan areas in five states suggest that spirituality measured by a relational-ideopraxis construct is possible. Further validation of relational modes, their causalities, and their effects on organizations, within all three aspects of spirituality, appear to be warranted.
Acknowledgements

First of all my deepest appreciation to the dissertation committee members, Dr. Pete Simmons, Dr. Cal Berkey and Dr. Shanker Menon, for their counsel, optimism and encouragement while working formal research on such a disputatious subject as spirituality in management theory. Likewise, my appreciation is extended to Dr. Hamilton Beazly and Dr. Judy Howden for allowing me to use their spirituality instruments in this research project. Also a special thanks to Dr. Judy Neal, who when I was debating early in the doctorate program with the University of Sarasota (now Argosy University) whether to commit to the subject of spirituality in management, was responsible for opening my eyes to all the other formal research on spirituality that was being conducted at that time.

My appreciation also goes out to all of those who directly or indirectly supported and contributed to the collection, interpretation and validation of the research efforts. To Larry Welton, Bob Anders, Daniel Powell and Doug Knighton, members of the suprapersonal panel of experts. To John Alvarez, Dennis Snyder, Mike Menchen, Jim Kissane, Garry Moore and Patti Moore, for their valuable contributions as panel members of the interpersonal aspect. My appreciation to Fr. Len Piotrowski, Roni and Michael Flynn, and Isabel Rojas (my wife) for their professional observations and recommendations on statements within the intrapersonal aspect. Special thanks also to Mons. John Neff for allowing the use of St. Paul as a site to run pilot tests.

As the time came to seek out subjects for the research, the eagerness and interest of all the diaconate directors of the major metropolitan areas contacted was also encouraging. Therefore my appreciation goes out to Fr. Alan Weber and Vincent Alterio
(St. Petersburg), George Miller (St. Louis), Alfred Mitchell (Atlanta), Jerry Klement (Austin), Ian Taylor (Miami), Bob Kinsley (Orlando) and Jim Swiler (New Orleans) as well as all the deacons and spouses they represent.

In many ways this dissertation represents not only an academic and professional achievement, but a personal milestone as well. Therefore, it is inevitable to conduct research on the subject of spirituality without reflecting and recognizing some of those that share the same journey and were key collaborators in discovering and forging a keen theoretical and practical interest in the subject. To Jesús M.(+), Hilda Pagán and Fr. William Esters, who spent many years immersing me into the Schoenstatt Movement and the life and works of Fr. Joseph Kentenich. To Dr. Emilio Ramos Ducos, Eng. Ruben Garcia, and Sr. M. Nancy Arroyo and her sisters, Victoria Patris, and many others, who helped convert many of Schoenstatt's ideas into a fulfilling and enjoyable practice. In a very special way, much gratitude goes to all the members of my family. For Maria de Los Angeles, Orlando and Giancarlos; a constant reminder of the love and joy of family life. For Carlos José, in highlighting the urgency of self-discovery and intensely living the determination to fulfill one's calling in life. For Teresa Cristina, a vivid reminder of the subtle but powerful ways of learning with the heart. For Rosamari, a reminder that relational activity entails forgiveness and that there are many paths in the pursuit of fulfillment. For Joseline; despite her physical and mental handicaps, she is the closest I will get to living with an angel. Finally, to Isabel, my life-partner, soul mate and wife. Without her love, patience and understanding, the entire journey and therefore this research project, would have never happened.
# TABLE OF CONTENTS

Abstract ........................................................................................................................................... ii
Copyright Page................................................................................................................................ iv
Acknowledgements ......................................................................................................................... v
TABLE OF CONTENTS ..................................................................................................................... vii
List of Tables ...................................................................................................................................... x
List of Figures ..................................................................................................................................... xi

CHAPTER ONE: THE PROBLEM ........................................................................................................ 1

Problem Background ....................................................................................................................... 3
Literature Review ............................................................................................................................. 5
Purpose of the Study .......................................................................................................................... 9
Research Hypothesis ....................................................................................................................... 10
Limitations .......................................................................................................................................... 12
Definitions .......................................................................................................................................... 13
Importance of the Study .................................................................................................................. 16
Brief Outline Description ............................................................................................................... 17

CHAPTER TWO: LITERATURE REVIEW ...................................................................................... 20

Historical Development of Spirituality in Management ................................................................. 20
Recent Trends in Spirituality Discourse .......................................................................................... 22
Definitional Components of Spirituality ........................................................................................ 27
Framework Development and Supporting Theories ......................................................................... 37
  Definition and Selection of Relational Mode ............................................................................... 44
  Relational Modes for the Intrapersonal Aspect .......................................................................... 46
  Relational Modes for the Suprapersonal Aspect .................................................................... 52
  Relational Modes for the Interpersonal Aspect .................................................................... 58
Advantages and Limitation of the Framework ................................................................................. 66
Competing Frameworks of Spirituality ........................................................................................... 70
Summary of the Review ................................................................................................................... 72
CHAPTER THREE: METHODOLOGY

Research Design ........................................................................................................ 75
  Instrument Design .................................................................................................. 77
  Instrument Reliability Methodology ..................................................................... 79
  Instrument Validity Methodology ......................................................................... 81
Selection of Subjects ................................................................................................. 86
Instrumentation .......................................................................................................... 89
Methodological Assumptions and Limitations .......................................................... 93

CHAPTER FOUR: FINDINGS ..................................................................................... 96

Restatement of the Purpose ..................................................................................... 96
Description of the Sample ....................................................................................... 98
Summary of Demographic Data ............................................................................... 101
Results ..................................................................................................................... 104
  Pre-requisites and Assumptions ........................................................................ 106
  iSAS Validity Tests .......................................................................................... 107
  Threats to Construct Validity ............................................................................. 111
  Additional Analyses .......................................................................................... 112

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS ......................... 117

Conclusions ............................................................................................................. 119
Recommendations .................................................................................................... 122

List of References .................................................................................................... 129
Appendix A: Informed Consent Letter .................................................................... 151
Appendix B: The Independent Spirituality Assessment Scale (iSAS)© ................. 153
Appendix C: Research, Human Subjects Approval Form ..................................... 159
Appendix D: Beazley's Permission, SAS© ............................................................. 161
Appendix E: Howden's Permission, SAS© ............................................................. 163
Appendix F: Summary of suprapersonal models ..................................................... 165
Appendix G: Literature volume search ................................................................. 167
Appendix H: Institutional Consent Forms ................................................................. 169
Appendix I: Test Specification Table ...................................................................... 172
Appendix J: ProQuest Database Ten Year Search.................................................... 175
Appendix K: Spirituality Instruments, Properties and Attributes............................ 177
Appendix L: Map of relational modes to management theory and research topics...... 180
Appendix M: Results of Exploratory Factor Analysis for the iSAS......................... 182
List of Tables

Table 1. Results of EBSCO Yearly Search with Keywords "Spirituality and Management" .................................................23

Table 2. Sources and Coding of Spirituality Definitions ..........................................................36

Table 3. Relational Modes Identified as Significant to Measuring Spirituality within a Relational Ideopraxis Framework ..................................................................................47

Table 4. Reliability and Validity Test Plan ..................................................................................80

Table 5. Sampling plan for testing the reliability and validity of the iSAS ...........................87

Table 6. Response Rate of the Study Sample .................................................................100

Table 7. Demographic Characteristics of Respondents ..........................................................102

Table 8. Reliability and Validity Test Results .......................................................................105

Table 9. Inter-item Correlation for the iSAS .......................................................................113
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>A graphical depiction of the relational ideopraxis framework of spirituality</td>
<td>67</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Histogram of iSAS responses from the robust control group</td>
<td>109</td>
</tr>
</tbody>
</table>
CHAPTER ONE: THE PROBLEM

The historical evolution of management theory and practice have recently been influenced by a powerful force, such that if properly directed, seems to have the potential to result in a most profound contribution, not only to the aforementioned professional field, but to humanity as a whole (Neal, Bergmann-Lichtenstein, & Banner, 1999). This force, extensively discussed in the popular literature (Mitroff, 1999; Richards & Bergin, 1997) and for decades deemed inappropriate in the business world (Conger, 1994), has already served as a very serious research topic across many academic domains (O'Connell, 1999). Only recently has the effect of this force on the management disciplines been so defined that authors like Wagner-Marsh and Conley (1999) have characterized it as a major development in business management discourse. Despite a climate of reluctance (McGee, 2000), prejudice (Martin, 2000) and skepticism (Godz, 2000), the preliminary results and possibilities this force offers have prompted academics, consultants and theoreticians alike to seek initiatives leading to a more comprehensive understanding of this force's capabilities (Butts, 1999). The intensity of these research initiatives have resulted in the conception of a new field in management research, recognized by management professional organizations such as the Academy of Management (2001) and the International Academy of Business Disciplines (2001). The force responsible for this new field in management theory and practice is spirituality.
In their work "A Spiritual Audit of Corporate America", Mitroff and Denton (1999) recognize the management of spirituality as one of the most important acts of management, and place the relevance of spirituality into perspective:

"We believe that the choice confronting humanity at this critical joint is not whether organizations should become more spiritual but rather how they can. If organizations are to survive, let alone prosper, then frankly we see no alternative to their becoming spiritual" (Mitroff & Denton, 1999, p.168).

Yet at the threshold of this newly formed discipline initiated by a popular interest (McCormick, 1994; Nadesan, 1999) stand the sentinels of field research methodologies in the forms of research questions, sampling of respondents, construction and validation of measures, data collection methods, and the objective presentation of research findings (Cook & Cambell, 1979). Historically, scientific rigor and spirituality matters in many fields of study have collided (Appleyard, 1994; Slife, Hope & Nebeker, 1999), a situation also true in the management disciplines (Mitroff & Denton, 1999). It is within the gap between the excitement of a new field in management theory generating an abundance of theoretical discourse, and the sparse availability of empirical studies characterized by scientific rigor that the present study is conducted.

The objective of this chapter is to offer an overview of the researcher's intent to conduct formal research in the area of operationalized spirituality frameworks applicable to management theory and practice. In order to accomplish this task, the researcher presents in this chapter a background of the problem followed by a brief literature review. After the review, the purpose of the study is discussed, and translated into a research hypothesis. Following the formulation of the hypothesis are sections on research definitions and limitations. Finally, this chapter concludes by stating the importance of
the present study to the field of spirituality in management theory and practice, followed by an outline of the entire research project.

Problem Background

As a background to the problem stated earlier regarding the gap between theoretical and empirical research of spirituality in management, the next paragraphs offer some insight into the purported potential of spirituality, the complexities of its nature, and the difficulties of measuring such an elusive concept.

The potential for spirituality theory in the management disciplines has generated a large volume of primarily theoretical literature, suggesting benefits for the workplace environment, organization performance, leadership styles and management functions. Regarding the workplace, DeValk (1996) posits that organizations are increasingly becoming the place where employees operationalize their search for meaning. Similarly, Neal (1999) observes that the workplace itself has a significant role in fulfilling the needs of wholeness and integration. In agreeing with the above observations, Bainbridge (1998) concludes that workplace is where most people find their sense of meaning and notes that corporations seemed to have drifted from a strictly profit, to a profit and worker well-being goal. With respect to the organizational impact of spirituality, Kahnweiler and Otte (1997) contend that if organizational vision and values are shared, spiritual experiences can be organized and directed. Neck and Milliman (1994) state that spirituality is related to organizational performance. Primeaux and Mullen (1999) present
a case for spirituality as a means of fostering interdependency and transformation in business. Storm (1991) notes that personal spiritual development in the workplace also leads to positive corporate development. Walsh (1998) argues that there is a relationship between spirituality and organizational resilience to adversity. Mirvis (1997) evaluates spirituality and team performance, stating that work is regarded as a source of spiritual growth and connectedness with others in the organization. Finally, leadership styles and management are also topics influenced by spirituality opportunities. For instance, McCormick (1994) claims that spirituality is related to the manager's behavior at work. West-Burnham (1997) states that since leadership consists of translating beliefs into action, it is therefore spiritually grounded. Patton (1999) found that spirituality can be a source of coping with difficult work conditions. Conger (1994) sees a complementary relationship between spirituality and leadership practices, while Potts (1998) finds a positive relationship between spiritual maturity and better mental health. These are just some examples of the professed benefits of spirituality for the workplace, organization performance, leadership styles and management functions.

Yet the keen observer may conclude that a steady stream of empirical research on the subject is in fact quite sparse among the literature (Mitroff & Denton, 1999). As a consequence, the literature on spirituality and management seems to point to an impending chasm, where there is more breadth than depth of subject (Sass, 1999). Some of this scarcity has been attributed to, among other causes, the compulsion to quantify research (Mitroff & Denton, 1999), a lack of clear and consistent definitions and constructs (Zinnbauer & Pargament, 1997), and a perpetual philosophical disagreement between science and spirit (Appleyard, 1994). Despite these observations, the researcher
feels compelled to join ranks with other researchers aware of this trend and willing to initiate experimentation that may contribute, at least in small manner, to reversing this trend.

Therefore, within these constraints characterized by the infancy of the spirituality discipline within management, a brief overview of the evolution and current state of the field is offered as a background prior to defining the problem statement. A more comprehensive examination of the topic is offered in Chapter 2, the Literature Review.

Literature Review

A genuine interest in spirituality as a causal and explicationary factor across many disciplines has emerged from the popular and academic literature in recent years. For instance, according to the National Institute for Healthcare Research, by 1997 more than 350 published studies on spirituality and health outcomes are documented (O'Connell, 1999). In observing other disciplines, spirituality research topics are found in the psychological sciences (Duvall, 1998; Hamilton & Jackson, 1998; Slife, Hope & Nebecker, 1999; Zinnbauer, Pargament & Scott, 1999), psychotherapy (Boadella, 1998; Elkins, 1995, 1999; Karasu, 1999; Mack, 1994; Nino, 1997), substance abuse recovery (Bristow-Braitman, 1995; Goldfarb & Galanter, 1996; Janusiewicz, 1999; Johnsen, 1993; Miller, 1998), family therapy (Prest & Keller, 1993), and stress management (Quick, Quick, Nelson & Hurrell, 1997). Still other fields in which spirituality research activities have flourished include clinical nursing (Meraviglia, 1999), counseling (Benjamin &
Looby, 1998; Garrett & Wilbur, 1999; Porter, 1995; Parker, Horton & Shelton, 1997; Westgate, 1996), social work education (Okundaye & Gray, 1999), occupational therapy (Howard & Howard, 1997), adult education (Zinn, 1997), political and social science (Roof, 1998), curriculum development (Iannone & Obernauf, 1999) and even in sports (Dillion & Tait, 2000).

Just as with the previously mentioned disciplines, the interest of spirituality in business management is also evident from the literature (Burak, 1999; Tischler, 1999). Evolving areas of recent research within management theory include spirituality as an explicatory organizational development phenomena (Brandt, 1996), as a potential source of competitive business advantage (Gozdz, 2000), and as a factor of organizational development and transformation (Brandt, 1996; Buchman, 2000; Konz & Ryan, 1999; Neal, Bergman-Lichtenstein & Banner, 1999; Wilson, Hacker & Johnston, 1999). Other areas of research within the management disciplines include the impact of spirituality in organization life (Craigie, 1999; King & Nicol, 1999; Neck & Milliman, 1994), career development (Bloch & Richmond, 1997; Hansen, 1993), leadership (Cacioppe, 2000a; Cacioppe, 2000b; Conger, 1994) and workplace issues (Butts, 1999; Freshman, 1999; Klein & Izzo, 1999; Neal, 1999).

There are recent published findings relating spirituality to specific areas of management theory. For instance Strack (2001), using a confirmatory factor analysis, found a moderate to strong relationship between spirituality and self-perceived effective leadership practices among healthcare managers. In another study, Acker (2000) found that individual spiritual transformation can influence organizational transformation. In another publication, McGeachy (2001) posits that spirituality at work is fueled by the
finding that personal fulfillment and high morale are strongly related to outstanding performance, and therefore, to an organization's financial success. Finally, in an empirical study on 141 employees from a public healthcare organization, Frew (2000) found that many of them integrated spirituality into their day to day work practices and that they also showed a significant negative relationship with respect to work strain. These studies serve to illustrate the seriousness and practical value of spirituality as a research topic in management theory.

A most challenging task for any researcher engaged in theoretical or empirical studies in spirituality is that of composing a working definition. Specifically within the management disciplines, the literature shows that the definitions of spirituality used in empirical research remain, for the most, ambiguous and inconsistent (Butts, 1999; Cavanaugh, 1999; Konz & Ryan, 1999; Milliman, Furgusson, Trickett & Condemi, 1999). Therefore, in order to design a definition for the present study, a technique used by Leclerc, et.al. (1998), Mitroff & Denton (1999), and Freshman (1999), with some modifications, is selected. This technique consists of reviewing a series of definitions from sources most quoted in the recently published academic research, extracting common definitional components, and exploring the robustness of these definitional components with an even broader review of the literature on spirituality. The definitional components with the strongest acceptability within this broader review are retained here, as a foundation for composing a definition and formulating a framework.

The results of a comparative analysis of 27 definitions of spirituality reveal at least ten common definitional components. These components are, a supranatural (spiritual) presence, an intrapersonal aspect, a suprapersonal aspect, an interpersonal
aspect, a component defined in this study as "ideopraxis" (the effort to maintain a congruent worldview-lifestyle complex), and the attributes of unity, orientation, mobilization, and individual uniqueness. With these definitional components extracted, the present study argues that the construct of spirituality may be defined as a relational-ideopraxis construct. Hence, spirituality is understood here as the relational dynamics among the divine, self and others in maintaining a congruent ideology-life style (Schmidt-Wilk, Heaton, & Steingard, 2000). This relational-ideopraxis is centered on a supranatural or spiritual presence (i.e., God, Ultimate Power, Great Spirit, etc.) and unifies, orients, and mobilizes all aspects of life, namely, the intrapersonal, suprapersonal and interpersonal aspects. Although the main objective of the present study is to apply spirituality within the context of management theory, spirituality here is defined as a relational-ideopraxis, centered on a spiritual presence that unifies, orients and mobilizes all aspects of life.

The relational activities (intrapersonal, interpersonal, suprapersonal) contained within the definition of spirituality for the present study, suggest further analysis. Being able to define a variety of contributing expressions or modes of relational activity then becomes a focus of research interest. This area of interest motivates the researcher to introduce the concept of "relational modes", or a conforming arrangement of behaviors selected in response to a personal interaction context. In searching among 238 articles for the most prevalent relational modes sorted by aspect of spirituality (intrapersonal, suprapersonal, interpersonal), twelve relational modes emerge. Of these twelve relational modes, five modes align within the definition of an intrapersonal aspect, and are called "fulfillment of self", "self determination", "self control", "discovery of self" and
"enrichment of self". Three of the twelve modes are associated with the suprapersonal aspect and are defined as the transactional, transformational and transfigurational modes. Finally, the last four modes discovered belong to the interpersonal aspect, and are partnerships, groups, organization and "movement" (social, political or religious) relational modes. The researcher recognizes that these modes may represent only a portion of relational mode possibilities, yet they are deemed sufficient to demonstrate, albeit on a preliminary basis, the value of the relational construct.

Once the relational modes are identified and defined, they are used to develop a measurement instrument for testing the hypothesis of this dissertation, namely, that spirituality can be measured as a relational-ideopraxis construct independent of religious or denominational content. The construct validation and reliability estimates of this instrument, called the Independent Spirituality Assessment Scale, become the objectives that satisfy the purpose of this study, the next topic in this chapter.

Purpose of the Study

The purpose of the present study is to extract from the literature review the theoretical foundations for a relational-ideopraxis framework, operationalize the framework into an instrument, and then test its validity and reliability. This instrument, intended to measure spirituality regardless of denominational, religious or ideological preference, is called the Independent Spirituality Assessment Scale (iSAS) and is based on thirteen relational modes extracted from the literature. These relational modes, also defined as independent variables, are fulfillment of self, self determination, self control,
discovery of self, enrichment of self, transactional, transformational, transfigurational, partnership, small group, organizational, movements, and ideopraxis. It is expected that spirituality from a relational ideopraxis perspective would provide researchers with another measurement tool intended to help close the gap between the abundance of theoretical contributions and the scarcity of empirical studies, while remaining more palatable to the objections and biases of management theoreticians and practitioners.

**Research Hypothesis**

The present study hypothesizes that (a) a reliable and valid spirituality measurement scale can be developed independently from a religious context, (b) founded on a series of selected relational modes from intrapersonal, interpersonal and suprapersonal aspects, and (c) designed to serve the empirical research needs of management and other disciplines.

The research question for the present study is, can an alternative framework of spirituality, based on relational ideopraxis, be developed, operationalized and validated? Or in the null format, the hypothesis (H₀) of the present study is that spirituality can not be measured as a relational-ideopraxis construct independent of ideological content. Said differently, the hypothesis of the present study would be rejected if:

- **H₀₁**: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate normality (p ≤ 0.05).
- **H₀₂**: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity in a moderately large sample (n > 480, α ≥0.70).
H03: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate stability through a test / re-test correlation ($r \geq 0.90, p \leq 0.05$).

H04: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate item validity as measured by consensus of a panel of experts.

H05: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity ($\alpha_R \geq 0.70$) in a sample of known, robust spirituality persons (robust control group, $n \geq 200$).

H06: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate validity through statistical significance ($p \geq 0.05$) when comparing mean scores between a robust and a fragile spirituality control group.

H07: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate concurrency (correlation) with two other spirituality instruments ($0.30 \leq r \leq 0.60$).

H08: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate denominational bias when comparing mean scores ($p \leq 0.05$) between samples of known high spirituality persons from two different prevalent (U.S.) religious orientations.
H$_{09}$: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate a ceiling effect (skewness) in measuring spirituality levels among subjects from a robust spirituality control group.

Limitations

There are several theoretical and methodological limitations associated with the scope and potential outcome of this study. Some of the theoretical limitations include the attempt to compose a construct and measure a very elusive subject, a limited vocabulary available to express complex relational dynamics, dealing with a management discipline that from an empirical and theoretical perspective is still in its infancy, and the overabundance of common (as opposed to academic) literature. In addition, there is a methodological limitation related to the selection of only a thirteen spirituality supporting modes, while recognizing that other possibilities may exist. Another limitation is the preference, but unavailability, of a proven spirituality business organizational setting as the proscenium for operationalizing and testing spirituality theoretical outcomes. Without such a setting, the researcher is forced to take alternative approaches to conceptual validation. Other methodological limitations of the present study are related to sampling, and include the focus on an educated population (managers), limited ethnic variety, and the standard errors associated with self-reporting. Many of these limitations are related to time and resources, which hopefully can be overcome with other comprehensively designed research projects interested in following the framework here suggested.
Definitions

The following are some of the more frequently used terms in the present study.

**Supranatural presence (or spiritual presence)**-- a real time, felt or believed manifestation of a spiritual entity that unifies, orients and mobilizes the intrapersonal, suprapersonal and interpersonal aspects of a person's life.

**Self**-- is the aggregate of unique factors that constitute the individuality and identity of a person as a whole, or as the singular sum of intrapersonal, interpersonal and suprapersonal relational outcomes.

**Intrapersonal aspect**-- focuses primarily on the inner thoughts, feelings, values, etc. of the individual and is best described as the "inner world" of the person, the domain for self reflection and relationship to self.

**Interpersonal aspect**-- refers to the contextual application of spirituality in multiple interactions with others, either in pairs, groups or larger organizational structures (Danna & Griffin, 1999; Frederick, 1998; Gozdz, 2000; Nadesan, 1999).

**Suprapersonal aspect**-- refers to the domain of relationships with a spiritual presence, higher power, divinity, concept, or the "Ultimate" (Walton 1999).

**Ideopraxis**-- combines "idea" and "praxis" into a single word to describe a deliberate effort to unify theory and practice, or a skill describing the effort to integrate a worldview into everyday activities with a desired, long-term effect of alignment and profound transformation.

**Spirituality**-- is a relational-ideopraxis centered on a supranatural or spiritual presence that unifies, orients, and mobilizes all aspects of life, namely, the intrapersonal,
suprapersonal and interpersonal aspects. It is the objective and consequence of relational
dynamics among the divine, self and others in maintaining a congruent ideology-life style
(Schmidt-Wilk, Heaton, & Steingard, 2000).

Relational theory-- argues for an alternative human developmental process framed
against the values of interdependence, inclusiveness, interconnectivity, and community,
rather than on the traditional values associated with autonomy, compartmentalization,
independence and hierarchy (Zelvin, 1999).

Reflective practice-- a process, incorporating a range of different techniques, through
which one can acquire a deeper understanding of oneself and one's relations with others
(inclusive of spiritual entities) and one's working environment." (Hunt, 1998)

Transformational learning-- the relational process of construing and appropriating a new
or revised interpretation of the meaning of one's experience as a guide to action
(Mezirow, 1994).

Relational mode-- a conforming arrangement of personal behaviors selected as a response
to a contextual, relational demand.

Fulfillment of self-- an intrapersonal relational mode referring to an innate tendency
leading towards the maximal exertion of personal capabilities, inspired by a spiritually
centered relational ideopraxis.

Self-determination-- an intrapersonal relational mode that is characterized by autonomous
initiation and regulation of behaviors (behaviors with an internal locus of causality)
(DeCharms, 1968).
**Self-control**-- an intrapersonal relational mode in which behaviors are pressured and coerced from the outside (behaviors with an external locus of control) (Deci & Ryan, 1987; DeCharms, 1968).

**Discovery of self**-- an intrapersonal relational mode defined as the conforming arrangement of behaviors employed in response to a lifetime search of a personal, axial, life principle (Bogart, 1994).

**Enrichment of self**-- an intrapersonal relational mode defined as a conforming arrangement of behaviors employed in response to a quest for wisdom (Smoley, 2000).

**Transactional mode**-- a suprapersonal relational mode characterized by a contractual type relationship, based primarily on a "give and take" dynamics (Fortosis, 1992; Genia, 1997)

**Transformational mode**-- a suprapersonal relational mode seeking to evoke behaviors that promote and achieve profound personal changes capable of transcending personal wants, needs and desires (Wofford, Goodwin, & Whittington, 1998).

**Transfigurational mode**-- a suprapersonal relational mode defined as a set of ontologically oriented behaviors seeking integration of the personal, suprapersonal and interpersonal aspects of life by means of nurturing the individual's "inner child".

**Inner child**-- exemplifies behaviors that rise from a mature spiritual yearning for wholeness, fulfillment and for the true self (Whitfield, 1986).

**Partnership mode**-- an interpersonal relational mode that is defined as a specific set of behaviors typified by a one-on-one intimate personal relationship, with the ability to nurture inner growth and development through ideopraxis.

**Group mode**-- an interpersonal relational mode that is defined as the interpersonal dynamics of three or more persons, occurring within an ideological context (defined by
an organization) that is capable of nurturing all aspects of life (non-compartmented). Group mode is the setting where relational practice has preeminence in forming community (Wuthnow, 1994).

**Organization mode**-- an interpersonal relational mode that is defined as the primary setting for ideological experiences that provide context for the day to day relational experiences and describes the setting where ideological context has preeminence over relational activity.

**Movement mode**-- an interpersonal relational mode that is an acknowledgement of contextual organizational ideologies (e.g., culture, vision, mission) that are affected by the momentum of ideologies represented in movements (social, political, economical, religious). As movements gain a stronger presence within the cultural mainstream, their ideologies tend to migrate and alter ideologies in an organization (and vice-versa).

**Relational-ideopraxis**-- a construct of spirituality based upon pursuing a congruent ideology-lifestyle, animated within a relational context inclusive of spiritual subjects.

**Importance of the Study**

The present study on spirituality in management theory and practice offers at least three major contributions to the field. First, this study offers an alternative, albeit preliminary, spirituality construct and instrument designed to be inclusive of multiple ideologies, thereby minimizing discriminatory risks and resentments emerging from decisions skewed towards religious preferences. Second, the definitional component approach to spirituality is an attempt at reaching a more agreeable definition of
spirituality, a crucial step to successful cross-discipline (e.g., psychology, sociology, clinical, theology) comparative empirical studies and facilitating research continuity within the management discipline. The relational-ideopraxis framework of the present study prompts careful consideration and analysis of biases and exclusions in management discourse, such as an underestimation of relational theory (Fletcher, 1998), the rationale for a poor record of effective interpersonal relations at work (Meister, 2001), techniques to effectively address spiritual needs, and the lack of theoretical discourse inclusive of transcendent phenomena. Finally, it is also thought that the demonstration of spirituality as a relational-ideopraxis construct may suggest its relevance and importance to management theory development, and stimulate further research.

Brief Outline Description

The present study is composed of five chapters, each one leading up to a comprehension of, and then the testing, of the hypothesis.

The first chapter of the present study offer's an overview of the researcher's intent to conduct formal research in the area of operationalized spirituality frameworks applicable to management theory and practice.

The second chapter is the literature review, and is divided into six parts. The first part of the chapter consists of a historical overview of spirituality theory in management and is intended to offer a foundational setting for the subject. Recent trends to support the concept of spirituality as an emerging research topic across many disciplines, including the business management domain, make up the second part of the review. Once the value
of spirituality as a research topic is established, a working definition of spirituality and a theoretical framework are constructed using a series of definitional components common to 27 selected sources. This effort comprises the third and fourth parts of the literature review and is the theoretical foundation for the dissertation research. Once the definition is established and the framework for spirituality is constructed, the next part of the chapter addresses its advantages and limitations. The sixth and last part of the chapter presents an analysis of opposing frameworks and perspectives of spirituality in business organizational settings.

The third chapter offers a detailed account of the research methodology used to construct and validate the measurement instrument, the question here being if spirituality can be measured as a relational-ideopraxis construct. Specifically, the first section of this chapter presents details of the research design, including the development, validation and testing methodology of the measurement instrument, called the Independent Spirituality Assessment Scale (iSAS). An account of the rationale for test subject selection is offered next, followed by an analysis of the Independent Spirituality Scale (iSAS) and two other instruments also utilized in the present study, namely Dr. Hamilton Beazley's Spirituality Assessment Scale©, and Dr. Judy Howden's Spirituality Assessment Scale©. The third chapter concludes with a discussion of the constraints and limitations of the research design. Finally, the fourth and fifth chapters consist of the presentation and analysis of the data collected from the present study, the conclusions, as well as further research recommendations.

With this, the researcher has completed an overview of his intent to conduct formal research on an operationalized spirituality framework applicable to management
theory and practice. In the next chapter, the researcher offers a comprehensive review of the literature leading to the formulation of the relational ideopraxis framework of spirituality.
CHAPTER TWO: LITERATURE REVIEW

The present literature review is divided into six parts. The first part of this chapter consists of a brief historical overview of spirituality theory in Management and is intended to offer a foundational setting for the subject. Recent trends to support the concept of spirituality as an emerging research topic across many disciplines, including the business management domain, make up the second part of the review. Once the value of spirituality as a formal research topic is established, a working definition of spirituality and a theoretical framework are constructed using a series of definitional components common to 27 selected sources. This effort comprises the third and fourth parts of the literature review and is the theoretical foundation for the dissertation research. Once the definition is established and the framework for spirituality is constructed, the next part of the chapter covers the advantages and limitations of the suggested framework. The sixth and last part of the chapter presents an analysis of opposing frameworks and other perspectives of spirituality in the business organization setting.

Historical Development of Spirituality in Management

The literature on the evolution of both management and spirituality discourse in the United States at the beginning of the 20th century remained on mutually exclusive tracks despite isolated attempts by some authors (Weber, 1930). In the early 1900s, Management became recognized as a formal subject of study with landmark events such
as the first publication of a systematic set of management principles and the establishment of the first business school (Kennedy, 1999). From these simple beginnings emerged the scientific management theory of Frederick Taylor, which became a dominant management philosophy throughout the early decades of the century until the 1950’s, when management theory would shift to a decision theory orientation (Kennedy 1999). This mid-century evolution of management theory is then followed by a systems orientation in the 1960s, change and contingency management in the 1970s, new approaches to human relations and production quality in the 1980s, and paradigm management in the 1990s (Holt, 1999). Conversely, the evolution of spirituality in the United States remained a personal and private matter up to the 1950s, moving towards a more "public" moral discipline during the 1980s (Wuthnow, 1994). Most religious or spiritual interventions in management affairs were limited to carefully crafted personal practices performed mostly "behind the scenes" of evolving management practices until about the mid 1980s (Laabs, 1995). Interestingly enough, it is also during the 1980's that personal spirituality styles began shifting from institutionally oriented quests towards an individualized orientation (LaNoue, 1999), creating a demand for management training and development products that many times went beyond just workplace issues. By the late 1980s, a 30 billion dollar market for corporate-sponsored "inner-renewal" programs based on self-actualization, job performance, and organizational profitability had emerged (Jorstad, 1990). During the 1990s, the evolution of spirituality and management theories converge and awaken a bold interest in formulating spirituality-based theories and research within the academic management domain, resulting in the formation of a
new discipline. Specifically, three trends illustrate this convergence, and are illustrated in the next section.

Recent Trends in Spirituality Discourse

After a brief historical account of the development of spirituality and management theory, this next part reviews three recent converging trends in spirituality discourse that substantiate the value of spirituality as a formal research topic. The first trend is based on a noticeable increase in the volume of published articles over the last decade showing a merge of the spirituality and management subjects. The second trend is the simultaneous surge of research endeavors across many academic disciplines. The last trend is a sample of specific management research initiatives contributing to the formalization of spirituality as a discipline within management discourse.

As stated earlier, the first converging trend to validate spirituality as an emerging research topic, beyond religious boundaries, is based on a simple, cursory review of the popular and academic literature over a timeframe of ten years using an inter disciplinary database search. The results of a Boolean search using EBSCO's Academic Search Elite® with keywords "management and spirituality" from 1990 to 1999 are shown in Table 1. These results show that 251 articles are published in 1999, compared to only 34 published in 1990, or an increase in volume of over seven times, with a noticeable surge occurring in the mid-1990s. Comparable results during the same time frame are obtained using ProQuest® (Appendix I). It is evident from this data that "spirituality and management" has become an increasingly popular subject in the literature. There are
Table 1

Results of EBSCO Yearly Search with Keywords "Spirituality and Management"

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>34</td>
</tr>
<tr>
<td>1991</td>
<td>33</td>
</tr>
<tr>
<td>1992</td>
<td>54</td>
</tr>
<tr>
<td>1993</td>
<td>60</td>
</tr>
<tr>
<td>1994</td>
<td>99</td>
</tr>
<tr>
<td>1995</td>
<td>142</td>
</tr>
<tr>
<td>1996</td>
<td>159</td>
</tr>
<tr>
<td>1997</td>
<td>214</td>
</tr>
<tr>
<td>1998</td>
<td>222</td>
</tr>
<tr>
<td>1999</td>
<td>251</td>
</tr>
<tr>
<td>2000</td>
<td>227</td>
</tr>
</tbody>
</table>

Note. This search was conducted on 20 December 2000. The 2000 data was collected on 29 Oct 2001.
some researchers that view this increasing interest in spirituality beyond the religious domain, as a paradigm shift in Western philosophical discourse and empirical interests (Taylor, 1994).

The second converging trend to substantiate spirituality as a serious research topic is the emerging, genuine interest being observed across many academic disciplines. Some examples of this convergence include spirituality research in the psychological sciences (Duvall, 1998; Hamilton & Jackson, 1998; Slife, Hope & Nebecker, 1999; Zinnbauer, Pargament & Scott, 1999), psychotherapy (Boadella, 1998; Elkins, 1995, 1999; Karasu, 1999; Mack, 1994; Nino, 1997), substance abuse recovery (Bristow-Braitman, 1995; Goldfarb & Galanter, 1996; Jarusiewicz, 1999; Johnsen, 1993; Miller, 1998), family therapy (Prest & Keller, 1993), stress management (Quick, Quick, Nelson & Hurrell, 1997), and leadership (Strack, 2001). In the healthcare field, Mahoney and Graci (1999) observe that over the last 20 years there has also been an increasing interest in spirituality research. Other professional career fields conducting spirituality research projects include clinical nursing (Meraviglia, 1999), counseling (Benjamin & Looby, 1998; Garrett & Wilbur, 1999; Porter, 1995; Parker, Horton & Shelton, 1997; Westgate, 1996), social work education (Okundaye & Gray, 1999), occupational therapy (Howard & Howard, 1997), adult education (Zinn, 1997), political and social science (Roof, 1998), curriculum development (Iannone & Obernauf, 1999) and even sports (Dillion & Tait, 2000). In essence, there seems to be a wide-scale professional interest in recognizing spirituality as an important dimension across many disciplines (Teasdale, 1997).
The third and last trend intended to demonstrate the increased interest in formal spirituality research beyond the religious domain comes from academic sources pertaining to the management disciplines. Although preliminary attempts at applying spirituality in the workplace have been met with reluctance (McGee, 2000), prejudice (Martin, 2000) and skepticism (Godz, 2000), the literature offers an increasing number of empirical studies on the subject of spirituality applied to the business management disciplines. For example, recent developments in management and organizational theory highlight the value of spirituality as an explicatory organizational development phenomena (Brandt, 1996) and as a potential source of competitive business advantage (Gozdz, 2000). Other examples include spirituality in business and management theories (Cavanaugh, 1999; Laabs, 1995; McCormick, 1994; McMichael, 1997; Neal, 1997 Tischler, 1999), in organizational development and transformation (Brandt, 1996; Buchman, 2000; Konz & Ryan, 1999; Neal, Bergman-Lichtenstein & Banner, 1999; Wilson, Hacker & Johnston, 1999), as a factor in organization life (Craigie, 1999; King & Nicol, 1999; Neck & Milliman, 1994), in career development (Hansen, 1993; Bloch & Richmond, 1997), leadership (Cacioppe, 2000a; Cacioppe, 2000b; Conger, 1994) and in the workplace (Butts, 1999; Freshman, 1999; Klein & Izzo, 1999; Neal, 1999). Other areas purporting spirituality as a contributor to management and organizational development discourse include its relationship to organizational values (Mitroff & Denton, 1999), organizational mission and vision (DeValk, 1996), health and well-being in the workplace (Danna & Griffin, 1999), stress management (Quick, Quick, Nelson & Hurrell, 1997), and spiritual "personal calling" or vocation (Allegretti, 2000; Neal 2000).
This convergence is so well defined that Wagner-Marsh and Conley (1999) have characterized it as a major development in business management discourse.

There are already published findings relating spirituality to various areas of management theory that exemplify its potential merits. For instance Strack (2001), using a confirmatory factor analysis, found a moderate to strong relationship between spirituality and self-perceived effective leadership practices among healthcare managers. In another study, Acker (2000) found that individual spiritual transformation can influence organizational transformation. In another publication, McGeachy (2001) posits that spirituality at work is fueled by the finding that personal fulfillment and high morale are strongly related to outstanding performance, and therefore, to an organization's financial success. Finally, in an empirical study on 141 employees from a public healthcare organization, Frew (2000) found that employees that integrated spirituality into their day to day work practices showed a significant negative relationship with job strain. These studies are just a few that illustrate the practical value of spirituality in management theory.

These initiatives have resulted in the conception of a new field in management research, recognized by management professional organizations such as the Academy of Management (2001) and the International Academy of Business Disciplines (2001). If the evolution of management theory is based on ideological responses to underlying contradictions (Eastman & Bailey, 1994), then the historical exclusion of spirituality dynamics within management narratives in the U.S. has discovered fertile ground in which to evolve and flourish.
Although a historical foundation of spirituality theory and an observable convergence of recent research efforts in management and organization development have been established, the infant state of the discipline has a limited number of practical and proven models (Mitroff & Denton, 1999). It is within this limited arena that the next step in the literature review process of this dissertation, the formulation of a definition of spirituality and a contributing theoretical framework, are expanded.

Definitional Components of Spirituality

It would seem that a most challenging task for any researcher engaged in theoretical or empirical studies in spirituality is designing a working definition. This task becomes even more difficult given some of the research obstacles encountered. Some of these obstacles include the intensity of attitudes about seemingly religious interventions in business practice, the abundance of common literature as opposed to a more rigorous literature on the subject, the empirical elusiveness of the subject, and the infancy of the discipline.

One of the most recent findings of spirituality research in recent literature that has nurtured an increase of spirituality discourse in the business domain is the clear divergence between spirituality and religion. This separation of meaning is evident through both theoretical discourses (Mahoney & Graci, 1999; Meraviglia, 1999; Reiss, 1999) and by way of some more rigorous studies (Bristow-Braitman, 1995; Mattis, 2000; Zinnbauer, et.al., 1997). Although recent empirical research suggests that religion in the workplace remains a manageable diversity issue (Society for Human Resource
Management, 2001), the increasing amount of literature presented in Table 1 of the previous section also suggests that the divergence in meaning between spirituality and religion has made the inclusion of spirituality more agreeable to formal research across many academic disciplines, including Management. This divergence allows researchers and practitioners with opportunities to explore spirituality outcomes as they relate to organizational needs while minimizing discriminatory risks and resentments emerging from decisions skewed towards religious preferences (Freshman, 1999).

Despite this conceptual divergence between religion and spirituality, the search for definitions of spirituality in the literature seem as numerous as the studies reported. Theological research, for instance, defines spirituality in terms of a person's life outcomes in relation to God (Hunter, Maloney, Mills, & Patton, 1990). In psychology research the focus is more on the dynamics of "self" than on the relationships with spiritual beings (Pargament, 1997). Sociology tends to define spirituality in the context of the social morality of relationships, as well as the rituals and practices of social groups (MacQuarrie, 1992). Medical research describes spirituality as a personal search for the meaning of life as it relates to mind and body (Hiatt, 1986). As for the management disciplines, the literature shows that the definitions of spirituality used in empirical research remain ambiguous and inconsistent (Butts, 1999; Cavanaugh, 1999; Konz & Ryan, 1999; Milliman, Furgusson, Trickett & Consemi, 1999). However difficult the task, the propitious interest and anticipation of spirituality in management as a competitive tool demand that researchers offer their best efforts.

In searching the literature for a definition of spirituality suitable for this dissertation, a technique used by Leclerc, et.al. (1998), Mitroff & Denton (1999), and
Freshman (1999), with some modifications, is selected. This technique consists of reviewing a series of definitions from sources most quoted in the recently published academic research, extracting common definitional components, and exploring the robustness of these definitional components within a broader review of the literature on spirituality. The definitional components with the strongest acceptability within the broader review are retained, here, as a foundation for composing a definition, and later, formulating a framework.

Some of the most quoted works on spirituality that are selected for initial analysis are from Beazley (1997), Mitroff & Denton (1999), Teasdale (1997) and Zinbauer, et.al.(1997). A comparative analysis of the definitions of spirituality presented in these four works revealed ten common definitional components. These components are referred to here as a supranatural (spiritual) presence, an intrapersonal aspect, a suprapersonal aspect, an interpersonal aspect, a component defined in this study as "ideopraxis" (the effort to maintain a congruent worldview-lifestyle complex), and the components of unity, orientation, mobilization, individual uniqueness and potential. In the next paragraphs each definitional component is framed and further supported by the literature.

The first component, "supranatural presence" or "spiritual presence", refers to a sacred, intimate and personal relationship with a transcendent that offers and nurtures spiritual life. In the general sense "presence" means being available with the entirety of one's unique individual being (Paterson & Zderad, 1976), as the "gift of self" (Easter, 2000). The term "spiritual presence" allows researchers to focus on the effects of the subject's perceptions and behaviors without having to address the theological merits or
philosophical implications of its existence (Mittoff & Denton, 1999), and is sufficiently broad to include a diversity of spiritual subjects (Walton, 1999). Spiritual presence is recognized as a foundational concept in spirituality theory (Slife, Hope & Nebeker, 1999) and has been specifically identified as the most influential element in empirical spirituality studies of patients recovering from acute myocardial infarction (Walton, 1999). The literature suggests that individuals with personal experience of a spiritual presence feel less ontological stress (Astin, et.al., 1999); conversely, when significant adversity exists, the research seems to suggest that individuals tend to search for a spiritual presence (Hamilton & Jackson, 1998).

The next three definitional components are called here the intrapersonal, suprapersonal and interpersonal aspects of spirituality. However, before defining these aspects in a proper context, it is necessary to review the literature on the construct of self and its relationship to spirituality.

A key foundational theme in formulating a spirituality construct is the concept of "self", a topic best articulated in the field of psychology. It has been noted that over 300 studies in the field of psychology have addressed the concept of "self" in the last 25 years alone (Marcia, 1993), and that the psychology literature contains a robust catalogue of research studies validating the concept of self (Kroger, 2000; Marcia, 1993; Meuss, 1996). However, without diverting too much attention to the evolution of psychological theory developments and in consonance with the current level of theoretical discourse, the concept of "self" presented in this dissertation refers to the dynamic aggregate of factors that constitute the individuality and identity of a person as a whole (Steele, 1998; Winnicott & Davis, 1989). In this sense, the "self" comprises the person's total subjective
environment or "inner world" (Zinnbauer & Pargament, 1998) and the body (Meisenhelder & Chandler, 2000; Mergavilia, 1999; Upchurch, 1999), all operating and interacting with a social and cultural imbeddedness (Brichson, 2000; Byron, 1998). This definition of "self" is inclusive of earlier theories of self while at the same time allowing continued discourse of social, meta-psychological and extra-psychoanalytic interpretations (Sutherland, 1993). To put it simply, the self in the present study is viewed from a relational rather than an individualistic epistemology (Gergen & Walter, 1998).

Although the forging of definitions and theoretical developments of the concept of "self" seems more suitable for psychology, the construct has already demonstrated significant research value in the business management fields. Examples of this include measuring outcomes of the congruence of self with organizational culture (Edwards, 1999), relating personal identity to job performance (Ashforth & Kreiner, 1999; Gini, 1998; Welch, 1999), and in searching for a better understanding of change and innovation management concepts (Coopey, Keegan, & Emler, 1998; Lancaster, 1998). Other examples include assessing self in relation to team and group dynamics (Swann, Milton, & Pozler, 2000), as a bridging construct to address conflicts between work and family (Eagle, et.al., 1998), as a model to improve understanding of worker and supervisor behaviors (Judge & Cowell, 1997; Neelankavil, 2000; Tepper, 2000), and recently as a key concept of spirituality in the workplace (Ashmos & Duchon, 2000; Mitroff & Denton, 1999; Nadesan, 1999; Neal, 2000).

In short, "self" here is the aggregate of factors that constitute the unique individuality and identity of a person as a whole, or as the singular sum of intrapersonal, interpersonal and suprapersonal relational outcomes. Specifically, the intrapersonal
aspect focuses primarily on the inner thoughts, feelings, values, etc. of the individual and
is best described as the "inner world" of the person, the domain for self reflection and
connectedness to self (Burkhardt, 1994; Zinnbauer & Pargament, 1998). Within the
intrapersonal aspect, the person experiences the "self" as a powerful, intimate, and

Next, the interpersonal aspect refers to the contextual application of spirituality in
multiple interactions with others, either in pairs, small groups or larger organizitional
structures (Danna & Griffin, 1999; Frederick, 1998; Gozdz, 2000; Nadesan, 1999).
Finally, the supra personal aspect of spirituality refers to the relationship with a spiritual
presence, higher power, divinity, or the "Ultimate" (Walton 1999). In summary, it can be
stated that the intrapersonal aspect is primarily the domain of psychology, whereas the
suprapersonal aspect is the domain of philosophy and theology, and the interpersonal
aspect is within the realm of the social sciences in general. All three aspects describe a
relational view of self that acts upon and is influenced by the setting. Note that the
emphasis on the word "aspect" is also an attempt to “metaphorize” spirituality, much like
the aspects or faces of a prism and the three primary colors, which depend on intense
light (spiritual presence) to function.

Within the four initial definitions of spirituality evaluated (Beazley,1997; Mitroff
& Denton, 1999; Teasdale, 1997; Zinbauer, et.al., 1997) exists a component intended to
capture the conversion of an ideology or spiritually oriented worldview into day-to-
day practices, for which the term "ideopraxis" is created. This term can be understood as
the effort to maintain a congruent worldview-lifestyle. Ideopraxis combines "idea" and
"praxis" into a single word to describe a deliberate effort to unify theory and practice, or a
skill to integrate a spiritual worldview into everyday activities with a desired, long-term effect of alignment and deep transformation.

The concept of ideopraxis is evident throughout the literature of spirituality. For instance, in 12 Step-Programs that emulate the Alcoholic Anonymous (AA) set of recovery techniques, it is referred to as "ritualistic adherence to action strategies" (Birstow-Braitman, 1995). In the Native American spirituality it is called "walking the path of harmony and balance, respecting all one's relations" (Garrett & Wilbur, 1999). Other expressions of ideopraxis include "integrating one's values or beliefs with one's behavior in daily life" (Zinnbauer, Pargament, et.al., 1997), "a way of being and a way of doing" (Hamilton & Jackson, 1998), "a process of living out one's set of deeply held personal values" (Neck & Milliman, 1994), "a way of being and experiencing" (Mattis, 2000) and "meaningful directed behavior" (Mack, 1994). Comparable conceptualizations of the term "ideopraxis" include "engaged spirituality" (Rogers, 1999) and "applied spirituality" (Schmidt-Wilk, Heaton, & Steingard, 2000).

Furthermore, the concept of ideopraxis has already been addressed in organizational behavior studies. A lack of ideopraxis, or the inability to convert knowledge into action was the purpose of a four-year research project conducted by Pfeffer and Sutton (2000). In exploring why organizations, for the most, possess the knowledge of what needs to be done yet struggle to convert that knowledge into action, Pfeffer and Sutton (2000) have characterized this phenomenon as the "knowing-doing gap". Ideopraxis, as defined in the present study, is a skill required to defeat this organizational (and many times personal) predicament.
Finally, the remaining four definitional components of spirituality need to be discussed. The component "unity" is synonymous with terms like holism, integration, synergy, balance and cohesion. As examples of the unity component of spirituality, Fairholm (1997) says it "refers to an inner awareness that makes integration of self and all the world, possible", while Porter (1995) calls it a "shaping of the whole self", and Roof (1998) defines it as "wholeness in life". A particular manifestation of this component is the care for other life forms and the environment of the planet (Lincoln, 2000).

The component "orientation" refers to providing meaning, direction, and purpose in life (Ashmos & Duchon, 2000; Laabs, 1995; Mergavilia, 1999), while "mobilize" is associated with vitality, inspiration, movement and animation (Mack, 1994; Porter, 1995; Stanard, Sandhu, & Painter, 2000). The contextual uniqueness of each individual is captured in the "personal" component of spirituality (Fairholm, 1997; Hamilton & Jackson, 1998; Vail, 1998). In fact, Barnett, Krell and Sendry (2000) deliberately exaggerate this component of spirituality to accent its meaning, and call spirituality not only personal, but also "intensely personal". Finally, the "potential" component describes the dynamics of spirituality in awakening latent traits. To illustrate, Porter (1995) calls this component the "hidden image" of self, and Neck & Milliman (1994) define this component as a way to "reach one's full potential".

Although these ten suggested definitional components emerged as a synthesis of the works from Beazley (1997), Mitroff & Denton (1999), Teasdale (1997) and Zinbauer, et.al. (1997), the supporting literature points to other definitions that can be used to validate the above list of definitional components. As stated earlier, the robustness of
these definitional components may be established by analyzing them against a broader sample of definitions within the academic literature. In an exploratory fashion, the components are coded as supranatural presence (A), intrapersonal aspects (B), suprapersonal aspects (C), interpersonal aspects (D), ideopraxis (E), unify (F), orient (G), mobilize (H), personal (I) and potential (J), and frequencies of their mention noted. The results of this analysis, across a broader base of 27 definitions of spirituality encountered throughout recent literature, are shown in Table 2.

In reviewing the frequency results of Table 2, it can be noted that although some variability in the definitions (components) is evident, these results support the argument made by Mitroff and Denton (1999) that the definitional variance is not as dramatic as suggested by common wisdom. In fact, every single definition presented in this analysis recognizes the intrapersonal component as a unanimous common denominator. In addition, a substantiation of all the coded spirituality components (Codes A through I) is evidenced in at least 22 or more of the 27 definitions from academic sources, with the exception of "potential" (Code J) which is referenced in less than half of the definitions.

Based on these results, the researcher argues that a definition of spirituality can be generated using these nine definitional components common to the selected sample of 27 spirituality definitions obtained through a multi-disciplined search of academic sources. It is assumed that a longitudinal factorization of spirituality definitions encountered during the present literature review offers a higher degree of credibility, relatedness to other studies, and robustness in composing a definition of spirituality. Having said this, the forging of a definition of spirituality and the expansion of the resulting definition into a framework adaptable to management theory is the object of the next section.
### Table 2
Sources and Coding of Spirituality Definitions

<table>
<thead>
<tr>
<th>Article Citations</th>
<th>Coded Definitional Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Presence</td>
</tr>
<tr>
<td>Ashmos &amp; Duchan (2000)</td>
<td>N</td>
</tr>
<tr>
<td>Beazley (1997)</td>
<td>Y</td>
</tr>
<tr>
<td>Bristow-Braitman (1995)</td>
<td>Y</td>
</tr>
<tr>
<td>Conger (1994)</td>
<td>Y</td>
</tr>
<tr>
<td>Dehler &amp; Walsh (1994)</td>
<td>Y</td>
</tr>
<tr>
<td>Encyclopedia of Catholicism (1995)</td>
<td>Y</td>
</tr>
<tr>
<td>Fanning (1998)</td>
<td>Y</td>
</tr>
<tr>
<td>Fairholm (1997)</td>
<td>N</td>
</tr>
<tr>
<td>Garret &amp; Wilbur (1999)</td>
<td>Y</td>
</tr>
<tr>
<td>Gibbons (2000)</td>
<td>N</td>
</tr>
<tr>
<td>Guillory (2000)</td>
<td>Y</td>
</tr>
<tr>
<td>Hamilton &amp; Jackson (1998)</td>
<td>Y</td>
</tr>
<tr>
<td>Laabs (1995)</td>
<td>Y</td>
</tr>
<tr>
<td>Lampton-Brown (1999)</td>
<td>Y</td>
</tr>
<tr>
<td>Lewis &amp; Geroy (2000)</td>
<td>Y</td>
</tr>
<tr>
<td>Mack (1994)</td>
<td>Y</td>
</tr>
<tr>
<td>Mattis (2000)</td>
<td>Y</td>
</tr>
<tr>
<td>McCormick (1994)</td>
<td>Y</td>
</tr>
<tr>
<td>Mervaviglia (1999)</td>
<td>Y</td>
</tr>
<tr>
<td>Mitroff &amp; Denton (1999)</td>
<td>Y</td>
</tr>
<tr>
<td>Neck &amp; Milliman (1994)</td>
<td>Y</td>
</tr>
<tr>
<td>Porter (1995)</td>
<td>N</td>
</tr>
<tr>
<td>Roof (1993, 1998)</td>
<td>N</td>
</tr>
<tr>
<td>Stanard, Sandhu, &amp; Painter (2000)</td>
<td>Y</td>
</tr>
<tr>
<td>Teasdale (1997)</td>
<td>Y</td>
</tr>
<tr>
<td>Vaill (1998)</td>
<td>Y</td>
</tr>
<tr>
<td>Zinbauer, et.al. (1997)</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Frequency**

| 22 | 27 | 22 | 26 | 26 | 24 | 24 | 25 | 26 | 13 |

**Note.** The letter "Y" represents an inclusion or reference and "N" an absence or negation of the definitional component within the source.
In attempting to compose a definition of spirituality based on the validated components extracted from Table 2, the present study suggests that the construct of spirituality may be defined as a relational-ideopraxis construct. Said differently it is thought that an outcome of spirituality is the consequence of relational dynamics among the divine, self and others in maintaining a congruent ideology-life style (Schmidt-Wilk, Heaton, & Steingard, 2000). This relational-ideopraxis is centered on a supranatural or spiritual presence (i.e., God, Ultimate Power, Great Spirit, etc.) and unifies, orients, and mobilizes all aspects of life, namely, the intrapersonal, suprapersonal and interpersonal aspects. In essence, spirituality is defined as a relational-ideopraxis, centered on a spiritual presence that unifies, orients and mobilizes all aspects of life.

The dynamics, originality and potential of this definition of spirituality as well as its conceptual value in management discourse reside eminently in its relational character or dynamics of interdependency, an established conclusion in other disciplines. For example, Mack (1994) argued that any system would "highly benefit from a relational based spirituality", while in the field of counseling psychology, Berensen (1990) had noted the potential of a "spirituality of relatedness" theory. From an empirical perspective, some studies do exist that suggest a link between improved levels of personal relationships and a spiritual presence (Hall & Brokaw, 1995; Hall, Brokaw, Edwards, & Pike, 1998). In fact, there are studies specifically showing that the quality of relationships with a spiritual presence are more highly related to the quality of relationships with others than it is to spiritual awareness, or spiritual prompting (Hall,
et.al., 1998). Additional studies posit that a strong relational maturity is associated with a strong spiritual maturity (Tenelshof, 2000). Although it could be argued that management theory has under-theorized relational discourse (Fletcher, 1998), the present study posits that the development and migration of a relational definition of spirituality into a viable framework for management and organizational development can contribute to an improved understanding and further research of relational theory. Therefore it is only natural that a synopsis of the origins and basic principles of relational theory be presented in the next paragraphs as the substructure for developing a spirituality framework.

The basic tenants of relational theory evolved as a reaction to the over emphasis of acquiring knowledge by using rationalization, compartmentalization and self sufficiency as dominant values at the expense (underestimation) of alternative ways of knowledge, such as intuition, relatedness and interdependency (Jordan, Kaplan, Miller, Stiver & Surrey, 1991). In observing a deficit of relationally founded discourse in adult developmental theory, Chodorow (1974), Gilligan (1982) and Miller (1976) proposed a series of arguments for what is now recognized as the foundations of relational theory. In synthesis, relational theory argues for an alternative human developmental process framed against relational attributes, such as nurturing, connectedness and expression of feelings, rather than on the traditional (dominantly rational) values associated with autonomy, compartmentalization, and independence (Zelvin, 1999). Specifically, relational theory suggests that current models of adult development and fulfillment are biased, and are predominantly founded on what is considered "public sphere" characteristics, which celebrate individual over collective achievement, therefore fostering separation, individuation and independence (Fletcher, 1998). Conversely, the
"private sphere" characteristics, such as interdependence, mutual nurturing and emotional content, although representing an alternative perspective, are less valued and easily suppressed by the "public" sphere (Fletcher, 1998). To illustrate, in analyzing recent conceptualizations of "work", Fletcher (1998) notes that mainstream discourses have continued to discourage the "private" sphere characteristics mentioned above, and continued favoring further separation of the public and private spheres, resulting in an underestimation of relational activity as a relevant factor in its conceptual discourse.

Succinctly stated, relational theory argues for the preeminence of relational interactions over individuation tendencies (rational) in adult growth and development as a means to amend theoretical biases in discourse (Fletcher, 1998). Comparable theories sharing the preeminence of relational factors in theoretical discourse and the role of spirituality in growth and development include attachment theory and object relations theory (Tenelshoff, 2000).

The researcher has opted to select a context supported by relational theory for many reasons. First, the dynamics of the intrapersonal (relationship with self), suprapersonal (relationship with a spiritual presence) and interpersonal (relationship with others) aspects are defined within a relational context more representative of the "private sphere" attributes of intuition, interdependency and community (Fletcher, 1998). As a second reason, relational theory affirms the present study's preference for the term "relational" over the term "interconnectedness". The former elicits a more organic, personal and transformative connotation, whereas the later connotes a mechanical juxtaposition. A third reason for preferring relational theory in developing a spirituality construct is that relational attributes such as emotions, nurturing, healing, intimacy, interdependency and a
sense of community associated with the relational-ideopraxis construct suggested here and other practical spirituality frameworks (e.g., 12 Step Programs) are already contained and explained in relational theory. Fourth, the scarce management literature on "private sphere" attributes forces the researcher to explore well-established theories in other disciplines, in this case, the association of spirituality with adult development, a discipline that has already adjusted to new relational paradigms. Additionally, rational attempts to explicate phenomena that defy logic and rationality, for the most part, have dead-ended, preferring to obviate supra-rational events and dispose of them as outliers. Finally, the theoretical immersion of the relational ideopraxis spirituality framework within relational theory discourse allows future research to continue along a track that contributes in reducing biases within management theory development (Fletcher, 1998). In this context, the relational ideopraxis framework of spirituality subscribes to relational theory's arguments of relational preeminence as a context for discourse and research. In essence, it can be expected that the theory of spirituality contained in this dissertation will be operationalized along relational theory concepts and evolving management research trends seeking the recognition of nurturing, interdependency and a sense of community as alternative areas of management theory development.

As stated earlier, the definition of spirituality as a relational-ideopraxis as well as its conceptual value in management discourse, reside first in its relational character, best explained by relational theory. However, a complementary characteristic of the definition of spirituality suggested here is the concept of ideopraxis.

The concept of ideopraxis as defined in the present study can be best understood as a lifetime journey for a congruent ideology-lifestyle, animated within a relational context,
inclusive of spiritual subjects. Ideopraxis is presented here as a definitional component that captures the intent to unify theory and practice, a skill necessary to integrate a worldview into everyday activities with a profound alignment or transformation as an underlying strategic objective.

Based on the above definition, it can be inferred that the relational-ideopraxis concept contains a short term and long term perspective, which can be explained by different theories. Further discussion of the short term (operational dynamics) and long term (strategic outlook) perspectives of spirituality can be associated specifically with two evolving theories of adult learning, namely, reflective practice and transformational learning.

The theory of reflective practice, considered an integral part of spirituality, consists of various models designed to explicate the synchronization and unification of theory and one's day-to-day actions through a process of reflection and corrected behavior. This theory evolved primarily from the works of Schon (1983, 1987), Dewey (1933) and Habernas (1972, 1974) and its research value is well documented throughout the literature. For example, Morrison (1996) suggests a four stage reflection process to reconcile theory and practice, consisting of a description and interpretation of the existing situation, a reflection of reasons creating the current state, preparing an agenda of alternatives, and evaluating progress. Another model, offered by Smyth (1989), presents the four stages of reflective practice as description, information, confrontation and reconstruction. A simpler three stage model is presented by Knight (1996), which consist of understanding the desired changes intellectually, applying of the theoretical changes to practice, and evaluating the outcomes. It is argued here that the short-term (day to day)
The dynamics of ideopraxis can be explicated by a modified model (by the researcher) of Morrison's (1996) four stages of reflective practice. These are, Examination (*How did I come to this?*), Judgement (*What does this mean?*), Discernment (*What can I do?*), Resolve (*What will I do?*), and Ideopraxis (*How am I doing?). These five stages typify the short-term process of adjusting personal behaviors to the ideological context.

It may appear that individualized self-reflection is the only method suggested for reflective practice, when in reality this model is here considered improved when it is conducted with a partner, a spiritual presence, or in a group, in larger organizations. The name used for a relational contributor in reflective practice theory is the "reflective participant" (Habernas, 1988, p.93), where a key function of the participant or participants is to abate rationalization (Knight, 1996).

The ideas of reflective practice theory already exist in management theory, since "reflection" is considered a natural part of business decision-making processes (Knight, 1996). Traditional models of problem solving rely on the pondering of observed behavior and formulation of alternative solutions in many management fields (Turban & Meredith, 1985). Even prevalent management theories, such as change management (Worren, Ruddle & Moore, 1999) and learning organizations (Senge, 1990) rely on reflective practice. More to the point, change management is fundamentally a dialectic process of "realigning discordant narratives and images" (Faber, 1998, p.217), while for learning to occur in organizations, there must be reflection on action (Watkins & Marsick, 1992). These realigning activities are seen as examples of reflective practice in management.

Although Morrison (1996) notices that definitions of reflective practice are becoming more diverse, the present review prefers a definition offered by Hunt (1998)
for its recent contribution to the literature and its effort to associate reflective practice with spirituality. She refers to reflective practice,

"… as a process, incorporating a range of different techniques, through which one can acquire a deeper understanding of oneself and one's interconnections with others and one's working environment." (Hunt, 1998, p.325)

The preference for this definition is based on two arguments. First, the phrase "interconnection with others" is understood here as fundamentally relational, inclusive of suprapersonal subjects (spiritual presence). A second reason for the preference of this definition is its specific emphasis towards the work environment.

If the short-term or operational dynamics of spiritually centered relational-ideopraxis can be described through relational practice theory, the underlying strategic or long-term life objective of profound transformation can be described through transformational learning theory, as illustrated in the next paragraphs.

The theory of transformational learning emerged from adult learning theory and argues that through the initial prompting of a disorienting dilemma and the use of critical reflection and planned action, learners take on new meaning perspectives or "worldviews" as a way to make sense out of life experiences (Mezirow, 1978). In essence, transformational learning is,

"… the social process of construing and appropriating a new or revised interpretation of the meaning of one's experience as a guide to action" (Mezirow, 1994. p.222-223).

Other theorists have built upon this concept by discounting rationality as an exclusive knowledge-source and highlighting other means of transformational knowledge, such as affective learning, intuition, and learning through relationships (Taylor, 1997), a preferred subject of the present study. Although this model of transformational learning
has been used primarily as an argument for how individuals are initiated into spiritual development (Acker, 2000), its value also resides in its ability to explain the long-term effects of personal transformation shaped by a relational-ideopraxis centered on spiritual subjects. The long-term effects of spirituality within transformation theory are well documented. In fact, Taylor's (1997) review of 39 individual studies on transformational theory over a span of 10 years included at least five that specifically address the effects of spiritual relationships as a vehicle of personal transformation.

In summary, the arguments presented in the previous paragraphs establish that the dynamics of a spiritually centered relational-ideopraxis can be articulated through relational theory, and that the operational functioning (short term) and strategic objective (long term) of the ideopraxis concept is supported by reflective learning and transformational learning theories. By imbedding relational ideopraxis in these root ideas, the researcher is able to establish a theoretical foundation for the relational-ideopraxis construct spirituality in management, and is now prepared to operationalize the construct by means of selecting behaviors that represent these relational modes.

**Definition and Selection of Relational Mode**

So far it can be argued that the originality and potential of the definition of spirituality as a relational-ideopraxis developed in the present study reside in its thrust to achieve a congruent ideology-lifestyle complex, animated by relationships inclusive of spiritual subjects. However, to operationalize these theoretical arguments, it becomes necessary to observe behavioral outcomes emerging from the gamut of relational activities. Being able to define different contributing expressions or modes of relational
activity then becomes a key research interest. Therefore, as a next step, it is necessary to introduce "relational modes" as key concept in measuring spirituality.

A "relational mode" is defined as a conforming arrangement of personal behaviors selected as a response to a relational demand. Relational modes are bound by the context of the relationship and as such, can be assessed and improved upon through different methods, such as reflective-practice and transformational learning models. Other names used to express the concept of relational modes include "modes of relatedness" (Clarkson, 1990; Karasu, 1994; Todres, 1990) and "forms of relatedness" (Hobson, 1993). To illustrate this point, a manager displays a conforming arrangement of behaviors when dealing with subordinates (manager mode) which is different when dealing with superiors (subordinate mode), teaching (teacher-student mode), praying (transcending mode) or dealing with a spouse (spousal relational mode). The relational demands of each of these contexts evoke a particular set of behaviors that are subject to observation and characterization through different adult development theories. In essence, relational modes are selected sets of behaviors chosen in response to a relational demand, and are a significant to this study because they may be defined as variables with the potential to measure spirituality.

At this point an important research question must be answered: what does the literature identify as potentially significant relational modes for each aspect of spirituality that, in the aggregate, represent a valid measure of spirituality within a business organization context? This question is crucial to developing a measurement instrument and prompts the researcher to conduct a search for relational modes in both the literature on spirituality and management theory.
Specifically, 238 sources over an eight month period are analyzed for typical relational modes by aspect (intrapersonal, suprapersonal, interpersonal). Most of these articles evaluated are included as references to the present study. In addition, it is assumed here that in order to build a relational framework for spirituality, a minimal of three of the most referenced relational modes per aspect would be selected. The completion this analysis yielded 12 relational modes that are presented in Table 3. These relational modes ensure they are also applicable to management practice. A more in-depth account of the spiritual literature explaining the meaning of these relational modes and the literature sources evidencing their application in management theory is offered in the next paragraphs.

Relational Modes for the Intrapersonal Aspect

Of the twelve relational modes derived from the joint spirituality and management review of literature (Table 3), the modes selected to represent the intrapersonal aspect are, "fulfillment of self", "self determination", "self control", "discovery of self" and "enrichment of self". In the next paragraphs, each relational mode is defined using sources of literature on spirituality, followed by examples of their application in management theory and practice.

The fulfillment of self as a relational mode is based on the assumption of an innate tendency towards the full use of capabilities, talents and potential (Chang & Page, 1991; Goud, 1994; Hornby, 1990; Maslow, 1971; Rogers, 1961) and is linked to
Table 3.
Relational Modes Identified as Significant to Measuring Spirituality within a Relational Ideopraxis Framework.

<table>
<thead>
<tr>
<th>Relational Mode</th>
<th>Spirituality Aspect</th>
<th>Source Used to Define Mode</th>
<th>Source illustrating how mode is used in Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-determination</td>
<td>Intrapersonal</td>
<td>Deci &amp; Ryan, 1987</td>
<td>Palmer &amp; Pickett, 1999</td>
</tr>
<tr>
<td>Self-control</td>
<td>Intrapersonal</td>
<td>Deci &amp; Ryan, 1987</td>
<td>Feldman, 1999</td>
</tr>
<tr>
<td>Discovery of self</td>
<td>Intrapersonal</td>
<td>Reed, 2000</td>
<td>Neal, 2000</td>
</tr>
<tr>
<td>Transactional</td>
<td>Suprapersonal</td>
<td>Fortosis 1992; Genia, 1997</td>
<td>Lowe &amp; Galen, 1996</td>
</tr>
<tr>
<td>Transformational</td>
<td>Suprapersonal</td>
<td>Fortosis 1992; Genia, 1997</td>
<td>Lowe &amp; Galen, 1996</td>
</tr>
<tr>
<td>Transfigurational</td>
<td>Suprapersonal</td>
<td>Fortosis 1992; Genia, 1997</td>
<td>Haase, 1993</td>
</tr>
<tr>
<td>Group</td>
<td>Interpersonal</td>
<td>Fairholm, 1997</td>
<td>Haskins, et.al., 1998</td>
</tr>
<tr>
<td>Organization</td>
<td>Interpersonal</td>
<td>Wech, et.al., 1998</td>
<td>Haskins, et.al., 1998</td>
</tr>
<tr>
<td>Movement</td>
<td>Interpersonal</td>
<td>Johnston &amp; Klandermans, 1995</td>
<td>Freeman &amp; Gilbert, 1992</td>
</tr>
</tbody>
</table>
spirituality (Park, Meyers & Czar, 1998; Rowan, 1998). In a content validation study, Leclerc, Dube, Hebert and Gaulin (1998) are able to distill and categorize 36 indicators that lead them to define the construct in relation to self-perception and personal experience. Specifically these authors state that fulfillment of self is "a process through which one's potential is developed in congruence with one's self-perception and one's experience" (Leclerc et al., 1998, p. 74). In line with this definition, the present study recognizes the fulfillment of self as an innate tendency leading towards the maximal exertion of personal capabilities, inspired by a spiritually centered relational-ideopraxis.

Although void of any spiritual or transcending consequences, fulfillment of self as a relational mode in management theory has many applications. Most noticeable is the redefinition of "work" in relation to personal fulfillment in the context of a community in the workplace (Ashmos & Duchon, 2000; Cacioppe, 2000a; Cacciope, 2000b) and the trend from "employee satisfaction" to "employee fulfillment" observed in the Quality Management literature (Anderson, Rungtusanatham, & Schroeder, 1994). Other examples include fulfillment of self as factor in influencing attitudes towards organizational change (Yousef, 2000), in self-management and empowerment (Shipper & Manz, 1992), acquisition of job skills (Ryan, 1999) and as a factor in balancing work and life (Basch-Scott, 2000).

The next two relational modes, self-determination and self-control, are described within self-determination theory as opposite ends of a spectrum (Deci & Ryan, 1987). Self-determined behaviors "are characterized by autonomous initiation and regulation" and "control of self" behaviors are "pressured and coerced by intra-psychic and environmental forces" (Deci & Ryan, 1987, p. 1024). Similarly, DeCharms (1968)
categorizes "self-determination" as behaviors with internal locus of causality, and "control of self" as behaviors with an external locus of causality. Both of these modes are considered factors indicative of spiritual strength that made significant differences in the lives of war survivors (Shantall, 1999).

There are clear references to self-determination and self-control in management theory and practice. Employee self-determination is essential to business ethics (Maguire, 1999), job performance (London, Holt, & Thisted, 1999), authority and organizational power (Knight & McCabe, 1999), organizational structure (Romme, 1999) and performance strategies (O'Connell, 1999). More to the point, Palmer & Pickett (1999) find a direct relationship between self-determination and self-management. Regarding self-control as a relational mode, the management literature suggests a relationship between self-discipline and organizational control (Feldman, 1999), and between self-control and business ethics (Maguire, 1999). In fact, a longitudinal study of personal control in organizations, Ashforth and Saks (2000) argue that internal (personal) control begets external (group, organization) control. In essence, both self-determination and self-control are considered established relational modes in management theory as well as in spirituality.

Although the definitional component "potential" is not extensively documented in Table 3, there does seem to be some evidence in the transpersonal (spiritual) psychology literature to support the idea that potential is awakened through "discovery of self" as a relational mode. This particular mode has various names, such as "central life task" or "personal calling" (Bogart, 1994), "personal ideal" (Reed, 2000), "ego-ideal" (Kernberg, 2000) which as a whole, justify its inclusion as an intrapersonal mode. In fact, while
reviewing the literature the researcher has encountered philosophical, psychological, theological and pedagogical definitions supporting this form of "discovery of self" under the rubric of "personal ideal" (Rojas, 1989). In another case, Reed (2000) bases her definition of "discovery of self" on Plato's concept of "diaonia", and refers to personal ideal as the "wholeness of being realized when one uses rightly the highest moral ideal or vision within one" (Reed, 2000, p.10). From the psychological perspective, Kernberg (2000) notes the striking resemblance between the ego-ideal and a spiritually developed maturity. Furthermore, Jung (1934) noted that,

"True personality always has vocation, which acts like the Law of God from which there is no escape. Who has vocation hears the voice of the inner man; he is called. The greatness and the liberating effect of all genuine personality consists of this, it subjects itself of free choice to its vocation. (Jung, 1934, pp.175-176)"

The term "vocation" used in the quote above is understood in the present study as a unique calling, a personal journey, which may or may not coincide with a selected occupation or profession. In this context, the term "vocation" refers to more than just a job by which wages are earned. Along this same interpretation, Bogart (1994) calls it "a central facet of the narrative that a person constructs to make sense of his or her personal history" (Bogart, 1994, p.10) and Progoff (1986) calls it "a single directive principle unifying one's inward and outward life" (Progoff, 1986, p. 78). Theological support for the concept of vocation is contained in Psalm 139 (Confraternity of Christian Doctrine, 1970) and is also interpreted as the ontological meaning of the given name (Kentenich, 1991; Rojas, 1989). Therefore, in the present study the "discovery of self" relational mode is defined as the conforming arrangement of relational behaviors employed in response to a lifetime search of a personal, axial, life principle.
Again, the literature shows some use of this relational mode in management theory. Specific applications include self-discovery and career management (Kim, 1998), executive coaching (Wolf, 1998), the congruence of self discovery and the corporate culture (values, traditions, rituals)(Chen, 2000), and in the exercising of performance feedback between supervisor and employee (Dalessio, 1998). More to the point, there has been a recent interest in the re-definition of work as a personal "calling" or unique mission in life, inclusive of a spiritual component (Ashmos & Duchon, 2000; Neal, 2000).

The final relational mode within the intrapersonal aspect of spirituality is the "enrichment of self" mode. Specifically, this mode is defined as a conforming arrangement of behaviors employed in response to a quest for wisdom, considered an unpopular concept in the West (VanDusen-Wishard, 2000) yet intimately thought to be associated with spirituality (Smoley, 2000).

In the present review, wisdom is defined as a relational outcome derived from a combination of cognitive, reflective and affective qualities (Ardelt, 2000). The cognitive element of wisdom is related to seeking the truth (Hart, 1987; Maslow, 1970) through an awareness of transcendence (Kramer, 1990; Orwoll & Perlmutter, 1990) and reflective thinking (Clayton, 1982; Labouvie-Vief, 1990). The affective quality of wisdom emerges as a consequence of the cognitive and reflective elements, encouraging empathy, sympathy and compassion for others, which evidences a relational (interpersonal) character (Kramer, 1990). These qualities of wisdom are though to be interdependent (Ardelt, 2000), and are more accurately measured by ascertaining individual perception, rather than through debatable constructs (Hershey & Farrell, 1997).
The strongest theoretical development fostering the quest and preservation of wisdom in management discourse is through "knowledge management" (Greengard, 1998) and its sibling, "wisdom management" (Schrage, 1998). This theory is characterized by "a way to capture the wisdom of the workers within an organization in order to leverage that knowledge to its fullest extent or to preserve it after key individuals retire from an organization" (Verespej, 1999, p. 20). Other evolving interests in introducing wisdom in management theory include executive development and mentor leadership behavior (Godshalk & Sosik, 2000).

**Relational Modes for the Suprapersonal Aspect**

As defined earlier, the suprapersonal aspect of spirituality refers to the relationship with a spiritual presence, higher power, divinity, or the Ultimate (Walton 1999), which is primarily the domain of philosophy and theology. Of the twelve relational modes extracted from the 238 sources presented in Table 3, three are within the suprapersonal aspect and they are the transactional, transformational and transfigurational modes. The next paragraphs offer some background information and definitions for each of these suprapersonal relational modes, followed by a commentary on their employment in management theory literature.

In searching the literature for models that would describe levels of spiritual maturity (depth of suprapersonal relationships) that could be translated into relational modes, the researcher found two that are of particular relevance for their simplicity and similarities. One model is from Fortosis (1992) and the other from Genia (1997).
In the first model of spirituality maturity, Fortosis (1992) describes three stages of formation leading to a profound spiritual state, namely, the (a) formative integration stage, (b) the responsible consistency stage, and (c) the self-transcendent stage. In the formative integration phase, relations with a spiritual presence are described as conditional, where morals are binary in nature, convictions lack consistency and the interaction is very self-centered, all indicative of developing, yet tenuous, relationship. The second stage, or responsible consistency, can be described as a more mature relationship, where morals include dealing with gray areas, conviction are more consistent, with an increased interest in others. The third stage or self-transcendent wholeness is recognized by deep intimacy with a spiritual presence, minimal separation between public and private self, and a sense of transcendence for the sake of others.

In the second model of spiritual maturity relevant to the present study, Genia (1997) devises four types of spiritual maturity as a consequence of her empirical research between "spiritual support" (use of spirituality) and "spiritual openness" (inclination towards the spiritual) assessment scales. A high-support and high-openness person is defined as a growth-oriented individual, in which there is minimal conflict between convictions and tolerance of diversity. A low score on both spiritual dimensions characterizes an underdeveloped type, which she characterizes as an uncommitted and unconnected individual. An individual with high-spiritual support but low-openness is called a dogmatic type, or someone who can apply spirituality to self but without the involvement of others. The last type of maturity suggested by Genia (1997) has a low score on spiritual support, but presents a high score on the openness dimension. These are called transitional types, since they represent a population that has acquired openness to
the spiritual but are working towards (transitioning) specific applications of spirituality in their day-to-day lives.

With the exclusion of Genia's (1997) underdeveloped type, both spiritual maturity models discussed above represent relatively the same three distinct levels of relational depth, and constitute the theoretical foundation to argue for transactional, transformational and transfigurational relational modes, respectively. In other words, these three levels of spiritual maturity, as discussed and defined above by both authors, represent the relational modes selected in this review to measure the suprapersonal aspect of spirituality. A tabular comparison of these models as relational modes is shown in Appendix F.

The present study argues that these same three relational modes are evident in management theory and practice, although their application occurs, again, with the exclusion of the suprapersonal (spiritual) component. An illustration of these modes in management is offered in the next few paragraphs. Once the discussion on relational modes for the suprapersonal aspects is concluded, the last of the three aspects of spirituality, the interpersonal aspect, is analyzed.

The transactional and transformational relational modes used in the relational-ideopraxis framework of spirituality here, are easiest described using transactional and transformational leadership models readily available in the management and leadership literature. However the transfigurational mode requires a more elaborate theoretical discourse to justify the term and its applications in management theory.

Within the management and leadership literature, transactional and transformational styles between leaders and followers have been studied for over a two
decades (Lowe & Galen, 1996). These relationship styles are initially identified by Burns (1978) and operationalized by Bass (1985). The transactional style is recognized as a reward exchange process between leader and followers predicated on the follower's behaviors, whereas the transformational style is based on motivating followers to transcend personal needs and function within the organization's vision (Wofford, Goodwin, & Whittington, 1998). Although these relational modes emerge primarily from the leadership literature, they are clearly an integral part of management discourse (Spreitzer & Quinn, 1996).

This study argues that both leadership styles also represent relational modes that typify relations with a spiritual presence. A relationship based on conditions, self-centered and black and white morals in Fortosis' (1992) model, as well as the self-centered nature of Genia's (1997) dogmatic type suggest transactional or "give and take" relationships. Conversely, the increased "interest in others" noted by Fortosis (1992) in the responsible consistency stage and the "high openness / low spiritual support" indicated in Genia's (1997) transitional type, are both interpreted here as typifying the transformational mode.

The third relational mode within this spirituality aspect, namely the transfigurational mode, requires a more thorough theoretical analysis before presenting its application in management theory.

In analyzing the third stage of spiritual maturity presented in the Fortosis (1992) and Genia (1997) models, there seems to be a conceptual fit between "self-transcending wholeness" (Fortosis, 1992), "evolved growth" (Genia, 1997) and the broader concept of
the "inner child" as an image that captures their relational essence. As defined by Whitfield (1986):

"We each have a child within--the part of us that is ultimately alive, energetic, creative and fulfilled. This is our self--who we really are. Some psychotherapists, including Winnicott and Miller, call it the "true self". Homey, Masterson and others call it the 'real self'. Carl Jung called it the "Divine Child" (Whitfield, 1986, pp.1, 9).

This definition of the "inner child" seems to fit the typologies of spiritual maturity expressed in both models used for this review. For instance Fortosis (1992) mentions the absence of separation between public and private self and a faith strong enough to overcome tragedy and fears, whereas Genia (1997) characterizes this state as possessing a higher tolerance of uncertainty. These characterizations correspond to prevailing attributes mentioned in "inner child" discourse (Haas, 1993; Kentenich, 1994). The social-organizational, personal and ontological aspects of human development into a spirituality framework seem to point to the "inner child" (Hall & Brokaw, 1995). In other words, the present review assumes that the development of the "inner child" as a relational mode in spirituality typifies the third stage of spiritual maturity expressed by both Fortosis (1992) and Genia (1997). Through its specific connection with the concept of "authority", these stages also represent a theoretical element of management and organizational development. A further discussion, to follow, on the concept of the "inner child" should illustrate this point.

The loss of the "inner child" is considered a profound tragedy in the human development of our times (Stone & Winkleman, 1990). This "inner child" exemplifies behaviors emerging from a "yearning for wholeness, fulfillment and for the true self" (Wacks, 1994, p.84). The loss of the inner child (wholeness, fulfillment, and true self) is
the result of the undesirable behaviors (e.g., manipulation) implanted at an early stage of life (Haas, 1997), promoted primarily by the fragmented role and many times an absence of a healthy "father figure" (Furrow, 1998). Losing the "inner child" through a weak "father" figure not only has affected the potential for individual growth, it also carried consequences for social praxis (e.g., rebellion towards authoritative figures) and ontological significance (e.g., rebellion to the concept of God the Father) (Furrow, 1998). For instance, it is argued that the transcending meanings of leadership and authority are biased due to inner child behaviors formed by a weak "father image" (Yiannis, 1997). Said differently, the "inner child" as a relational mode, exemplifies behaviors that rise from a mature spiritual yearning for wholeness, fulfillment and for the true self (Whitfield, 1986). The "inner child" concept is also directly related to management theory in that authority constructs remain biased from the same father-child relationship (Fletcher 1998; Kentenich, 1994; Yiannis, 1997).

Again, in searching for a word to capture the essence of the above paragraphs as expressed in the spirituality maturing topologies of Fortosis (1992) and Genia (1997), the researcher has selected the term "transfigurational" mode. The transfigurational mode is defined as a set of behaviors that seek integration of the social-organizational, personal and ontological aspects as an ideopraxis by nurturing the "inner child". The transfigurational mode can be understood as a result of prolonged exposure to a transformational mode, in which not only fragmented "internal forms" are changed, but to a certain degree the "figure" is also changed, a phenomenon already characterized in leadership theory. To some degree the effects of transfiguration are related to the long-
term effects charismatic leaders leave on followers (Yiannis, 1997). The intent of the transfigurational effect is articulated in the following quote:

"I remembered something I'd read about several of the U.S. presidents, like Lincoln and Truman, Lincoln was a great president because he never thought he was the president. He saw himself as the acting president, standing in for a divine presence." (Hellman, 1995, p.48).

Other applications of the transfiguration phenomena include a non-spiritual version, where prolonged cultural assimilation in "forms" also changes the "figure" or physical appearance (Johnson, 1999). The objective of the explanation here is to illustrate the existence and potential measurements of a transfigurational mode, not on its causality.

In essence, the transfigurational mode typifies a most intimate relational-ideopraxis between a person's "inner child" and the spiritual presence. An interesting extrapolative consequence of this assumption is a potential evolution of leadership theory, from "transactional" to "transformational" into a "transfigurational" leadership style founded on the inner child relationship with a spiritual presence, a hypothesis that clearly goes beyond the scope of this dissertation.

This concludes the literature review, discussion and theoretical foundations for the transactional, transformational and transfigurational modes of the relational-ideopraxis spirituality framework. The next section addresses the final set of relational modes corresponding to the interpersonal aspect.

**Relational Modes for the Interpersonal Aspect**

Again, as discussed earlier, of the twelve relational modes derived from the joint spirituality and management review of literature presented in Table 3, five apply to the
intrapersonal aspect, and three are related to the suprapersonal aspect. The final four modes in Table 3 belong to the interpersonal aspect, and are partnerships, groups, organization and social movement relational modes, which are discussed in the next few paragraphs.

The partnership mode is defined by behaviors typified by a one-on-one relationship, with the ability to mutually nurture inner growth and development through ideopraxis. The intended contextual meaning of this deliberate, mutual nurturing entails a professional, psychological, social and spiritual growth bounded by the workplace environment, and by no means is intended to discount the significance of other partnerships modes beyond the scope of the present study, such as marriage (Wright 1998). In this relational mode, the partner eventually becomes a partial mental representation of the "self" (Aron, Aron, Tudor, & Nelson, 1991; Smith, Coats & Walling, 1999) that serves as a reflective agent in achieving a more authentic 'true self' and in helping connect with a "larger than self" context (Mezirow 1994). Specifically relevant to this study is the "larger than self" context represented by the interpersonal and suprapersonal aspects.

Examples of studies addressing the partnership relational mode in management theory include ethical modeling by partnership relationships (Koehn, 1998), customer relations (Price & Arnould, 1999), resolution of organizational conflict (Giuseppe, Brass, & Gray, 1998), and motivation concepts (Leonard, Beauvais, & Scholl, 1999). Of particular relevance to the partnership mode in the present study is the evolving scope of employee feedback, where counseling and guidance from the supervisor or mentor
surpasses the boundaries of just the work environment (e.g., personal issues, spousal conflicts, off the job behaviors) (Milliman & Zawacki, 1994).

The next two relational modes are the "group" mode and the "organization" relational mode, where group mode is defined as an interpersonal setting within an ideological context defined by the organization, and when relational (interpersonal) activities nurture more than just professional growth. Conversely, the "organization" mode is defined as the primary setting for ideological experiences that provide context for the day to day relational experiences. These modes, their mutual interaction, and supporting arguments for their existence in the literature and for this review are presented in the next few paragraphs.

In establishing that small groups are more relationally (interpersonal) oriented and large organizations are primarily contextually (ideology) oriented, the empirical evidence suggests that smaller groups stimulate and maintain a stronger focus on certain dynamics, such as cohesion, intimacy, member satisfaction and member participation that larger groups are unable to attain (Wheelan & McKeage, 1993). Said differently, smaller group process characterizations tend to be more relationally oriented (e.g., correcting behaviors, sense of personal support) than contextually oriented (e.g., vision, culture, values) (Shaw, 1981; Wech, Mosholder, Steel, & Bennett, 1998). Assuming that a sense of community can be built through either relational practice or contextual imaging, the group relational mode in this review refers to behaviors that typify the relational side of forming community. As such, Fairholm (1997) states: "Community means caring about members' lives, their growth, their competencies, and their happiness as inherent values, not for just what they may do for motivation and, eventually, the bottom line" (Fairholm, 1997,
Based on empirical evidence, Haskins, Liedtka and Rosenblum (1998) argue for large organizations to foster smaller, relational groups as a means to preserve a congruent person-organization fit. The small group relational mode leans more towards operationalization of a "psychological covenant" rather than the traditional "psychological contract" (Schien, 1970) among group members as a means to foster organizational (community) goals (Nisbet, 1990). In short, if community can be built through ideological context (e.g., mission, vision, culture, and values) or through relational practice (e.g., nurturing, personal support, caring), then the group mode is defined as the setting where relational practice has preeminence in forming community. This may occur through formal work-teams, small formal or informal groups, or even non-work groups loosely associated with the work environment, as well as beyond.

Conversely, if the "small group mode" is a set of behaviors that nurture the practical experiences of interpersonal relations, then the "organizational mode" describes behaviors that nurture the ideological context with more intensity than relational activity. In differentiating ideological context and relational activity, Wech, et.al. (1998) state, "After all, it is in the organizational context that group members are able to actualize their agency beliefs through involvement and participation. It should not be surprising, then, that in cohesive work groups, positive feelings members get from exercising their agency may spill over to the organization" (p.474).

Examples of the significance of ideological context at the organization level are expressed through the organizational culture, mission, vision, strategy, and values (Adams, 1993; Campion & Medsker, 1993; Parsons, 1995). The organization's contribution to building community then, is more related to ideological content or "coherent intent" than relational activity (Haskins, Liedtka, & Rosenblum, 1998), where the entire organization is viewed as "a community of competing communities" with a
common coherent intent (Parsons, 1995). A broader analysis of the literature confirms this tendency to characterize relational activities with small groups or teams and contextual intent with larger organizational activities (Appendix G).

In establishing the group and organization relational modes, this study recognizes their separate and combined contribution as a relational-ideopraxis force within management theory. In addressing the relevance of the group mode and organizational mode as criteria for organizational design, Fairholm (1997) argues:

"The time has come to employ new organizational designs. We need to focus on interactive communities of enabled, moral leaders and followers. We need to engage the people making up these communities in meaningful work, in work that ennobles them and their colleagues and customers. Our workplaces are communities in which many of us live much of our productive lives. We need, therefore, to know what we can about how to make work communities not only productive, but personally inspiring" (p. 174)

Both the relational mode (relations) and the organizational mode (ideology) represent key components in supporting a need to build communities in business organizations. For example, Lambert and Hopkins (1995) find evidence that a sense of community at work can actually be established by fostering appropriate policies (contextual) and well-designed jobs (contextual), and supportive workplace relationships (relational). Similarly, Barrett-Lennard (1994) contends that the idea of community pivots on a felt experience of relationships (relational) and a collectivity organized around needs or tasks (contextual). Finally, both modes are evident in the theory and development of "networked organizations" as an alternative to hierarchical structures (Larson & Starr, 1992; Achrol, 1997).

However, the recognition of the small group and organizational relational modes suggested by the present review encompass a spiritual component sometimes difficult to
recognize and operationalize in current management and organizational theory. In pondering about spirituality in business organizations, Vaill (1998) reflects on the challenges of this assumption: "Can there be a divinely grounded organizational behavior-- that is, a serious study in which organizational events are assumed to be codetermined by human and divine action?" (Vaill, 1998, p.172). The study of this human-divine codetermination in a setting typified by group and organization relational modes has been conducted and validated for religious organizations by Wuthnow (1994), but the degree of its application to the business domain remains primarily theoretical. Suffice it to state that an assumption of this study is that both group and organization relational modes with a human-divine codetermination can exist in business organizations.

The final relational mode within the interpersonal aspect of spirituality is the movement mode, an acknowledgement that the contextual ideologies defined by business organizations are affected by (and affect) the momentum of ideologies represented in broad social, political or religious movements. This study argues that as movements gain a stronger presence within the mainstream of social context, their ideologies migrate and also alter ideologies in the business domain, and vice-versa. A brief explication of movement theory and the illustration of some specific examples are offered to support this argument.

The Merriam Webster Collegiate (2001) dictionary generally defines movements as loosely organized, sustainable, and campaigning collectivities, intrinsically seeking social change. This social change has a direct bearing on its participating members. The Britannica Encyclopedia (2001) notes that members of movements undergo a
psychological reorganization, in which the new sense of security and value obtained through the new ideology is acquired at the expense of personal autonomy. This movement-participant relationship and its effect on cultures is characterized by Johnston & Klandermans (1995), who have collected and presented a respectable body of theoretical works that characterize the influence of social movements in national cultures. With these observations, it can be inferred that the cultural transformation initiated by social movements has a comparable effect within the ideological context expressed in business or corporate cultures. The brief discussion in the next few paragraphs illustrates this point.

In the last 5 years, social movement theorists have identified three major theoretical approaches to explain the dynamics of movement phenomena. These are (a) the frame processes, (b) mobilizing structures and (c) political opportunity theories (Johnston & Klandermans, 1995; McAdam, 1996). Framing processes refer to the way individuals and groups identify, interpret and express their grievances. Framing is a scheme of collective interpretations in which ideological meanings are packaged and operationalized by activists. Through the existence of frames, activists communicate and legitimate their actions. The second theoretical approach that characterizes social movements is described as mobilizing structures, and it specifically consists of social networks and resources that account for the activism and participation in social movements. Interpersonal ties, organizational membership, efficacy, and identity salience are some of the factors that influence social networks and movements (Taylor, 2000). The third theoretical approach that characterizes the dynamics of social movements is related to political opportunity theory. Political opportunity addresses collective behavior
as a political phenomenon, where groups are able to access and utilize power to their advantage (Taylor, 2000).

The nature of movements as expressed by these three major theoretical approaches is to identify macro issues in our society and exercise influence and direct pressure on established structures (Bradley & Howells, 1994), some eventually also becoming an influence in molding corporate ideology (Freeman & Gilbert, 1992; Scott, 1996). Examples of movements that have influenced business ideologies include the formulation and definition of minimal ethical standards for international business settings (Beyer & Nino, 1999; Nelton, 1996), forming healthy and responsive organizational climates (Cohen, 1995), and determining business ethical behaviors in general (Geltman & Skroback, 1997). Other significant examples of movements that have transformed the business setting include the Civil Rights movement (Van Buren III, 1998), the labor movement (Hannigan, 1998), the feminist movement (Hoggart, 2000), the green consumer movement (Valley, 1992), and the environmental protection movement (Blowers, 1997). In synthesis, it can be argued with some certainty that there are sets of relational behaviors rooted in social, political and religious movements that are adopted by organization members that may become a factor in changing the ideological context of the business organization. This effect is defined in the present study as the movement relational mode.

In summarizing this section of the literature review, a spiritually centered relational ideopraxis can be constructed using the twelve relational modes derived from the joint spirituality and management review of the literature above. Of these modes, five apply to the intrapersonal aspect, three are related to the suprapersonal aspect, and four
belong to the interpersonal aspect. A synthesis of the spirituality framework developed in this study as a relational view of self is presented in Figure 1.

Advantages and Limitation of the Framework

Although preliminary in nature, the study of spirituality through a relational-ideopraxis framework offers promising insights in the emerging research of spirituality in management. The definitional component approach to spirituality is an attempt at reaching a more agreeable definition of spirituality, a crucial step to successful cross-discipline (e.g., psychology, sociology, clinical, religious) comparative empirical studies and facilitating research continuity within the management discipline. As these definitional components are explored, additional concepts on spirituality emerged, such as ideopraxis, relational modes and spirituality aspects. In using these same definitional components as building blocks, this review is able to compose a theoretical framework that may assist in overcoming some of the prevalent concerns of management research.

These concerns include a clear distinction between religion and spirituality, the avoidance of direct association with any one specific ideology, religious sect, or denomination, a logical continuation of current management discourse founded on academic rather than on popular literature, and opportunity for interdisciplinary collaboration.

However, the researcher recognizes the theoretical and practical limitations inherent in the framework development and its applications. First, it is recognized that if
Figure 1. A graphical depiction of the relational idopraxis framework of spirituality centered on a spiritual presence with three aspects and twelve relational modes.
other researchers replicated the literature reduction process leading to a set of relational modes for spirituality, they may achieve different sets of relational modes for each spirituality aspect. However, the intent of the present review is to suggest that spirituality can in fact be measured by relational modes, regardless of which specific ones are eventually selected. The twelve relational modes suggested in this review represent only a first attempt at validating a relational ideopraxis construct. As a second limitation, it is recognized that each supporting theory used in the present review (e.g., relational theory, reflective practice theory) carries its own limitations as they are incorporated into the framework, and may present unpredictable synergistic outcomes. As a third limitation, the suggested theoretical framework may only represent a particular cultural population, primarily Western in nature, U.S., in particular. Next, although relational-ideopraxis theory has potential for social work, counseling, therapy, healthcare and other disciplines, the scope selected in the present study is limited to management theory and the business setting. In fact, a key assumption of this study is that spiritual relational-ideopraxis has already shifted to the work environment, where many employees are now "anchoring" their spiritual growth and development. Anchoring is defined as the setting "where individuals make meaning for themselves and have their meanings shaped" (Fineman, 1993, p. 13.), or the selected arena to satisfy the need for a congruent organizational and personal life exigencies (Dehler & Welsh, 1994). Finally, the infant nature of spirituality in management theory currently offers a limited research base from which to support theoretically based arguments. Simultaneously, the transference of proven concepts from
other research fields may require further validation before broader acceptance into the management field.

Despite these observations and precautions, it is thought that a cursory analysis of the relational-ideopraxis framework of spirituality offers some empirical and theoretical possibilities within management and across other disciplines. A vast realm of management research opportunities unfolds just by proposing replication of published studies and analyzing the effects and relationships of adding the spiritual or supranatural component. A second set of research possibilities exists simply by pondering the suprapersonal implications of leadership, management and organizational modeling and theory (e.g., transfigurational theory, spirituality and professional development, organizational development and spirituality). Similarly, other opportunities include researching the implications of the suprapersonal aspect for management theory, the effects of a convergence between individual spiritual and organizational journeys, and the possibility of new career fields, such as corporate spiritual developers, spiritual counselors and spiritual assessment consultants. Further research opportunities also include an analysis of the spirituality "angles" or the points where two aspects meet (e.g., interpersonal-suprapersonal angle), the effects of the intensity of a supranatural relationship on management theory, and considering the development of "transfigurational" leadership as a follow-on to transactional and transformational leadership.

In the next and final section to this chapter, the approach, utility and shortcomings of this spirituality framework are compared with other types of frameworks available in the literature.
Competing Frameworks of Spirituality

This section addresses three competing frameworks of spirituality encountered in recent literature that share the same purpose as this study, that is, to compose and validate a spirituality construct operationalized within the context of management theory. In evaluating the strengths and weaknesses of these competing frameworks, the researcher is able to temper the potential, and limitations, of his own theoretical developments and findings.

The first competitive framework on spirituality in management theory is from Ashmos & Duchon (2000) who argue that spirituality can be understood through the operationalization of three components: inner life, meaningful work and a sense of community. For this framework, spirituality is defined as "...the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community" (Ashmos & Duchon, 2000, p.140). This framework assumes that the private life correlates "inner life" at work, and that through the building of community at work, spirituality can be measured. Its measurement scale is composed by using a panel of experts to derive a valid set of statements directed at assessing three components of spirituality in the work environment. In the first part of the three-part instrument, respondents are asked to describe issues of spirituality at work. In the second part, respondents characterize spirituality and their work environment and in the final part of the instrument, respondents are asked to document observations on spirituality issues within their organization.
This framework is attractive for its simplicity, innovative conceptualization of work as a task with broader meaning, and its recognition that the degree of workplace spirituality is a function of organizational design of both work and community. Its main thrust is that organizations have a responsibility to recognize employees' spiritual needs, and are compelled to act accordingly. However, this model addresses only two of three spirituality aspects (interpersonal and intrapersonal).

The second framework of spirituality comes from Howden (1992) and is created in response to earlier, less comprehensive instruments for measuring spirituality (Fanning, 1998). Although developed for the Nursing profession, this framework was derived from the literature of multiple disciplines and argues that spirituality consists of the interrelationship of four variables, namely, unifying interconnectedness, purpose and meaning in life, inner resources and transcendence. Howden (1992) argues that these variables are moderated by demographics, situational factors, and is sufficiently robust in psychometric strength to warrant its application in a wider adult setting.

This framework is comprehensive in its conceptualization (Stanard, Sandhu, & Painter, 2000) and based on sound literature arguments that would allow its application in the business setting. Many of its arguments parallel the relational-ideopraxis framework suggested in this study, including the freedom to focus on spirituality research without addressing ideological content. However, despite its robustness, the literature review conducted for this chapter is unable to find other studies using Howden's (1992) construct.

The third and final competitive framework is from Beazley (1997). The root argument for his framework is that spirituality is an attitude, and as such, is measurable
through affective, cognitive and behavioral components. Specifically, Beazley (1997) identifies two definitive dimensions or direct measurements and three correlated or indirect measurements of spirituality. The two definitive dimensions are "living a faith relationship with the transcendent" and "engaging in prayer, meditation" activities. The three correlated dimensions are honesty, humility and service to others (Beazley, 1997).

The simplistic definitional framework, accompanied by an elaborate instrument design process and measurement scheme consisting of direct and indirect spirituality variables, constitute the main advantages of this framework. Spirituality defined and measured as an attitude facilitates the research of psychological issues, can be interpreted from an ideopraxis perspective, and seems to be consistent with relational theory. However, the definitive dimensions are expressed in a religious rather than ideological connotation.

Summary of the Review

In summary, the literature review conducted in this chapter consisted of six parts. The first part offered a historical overview of spirituality theory in management and is intended to render a foundational setting for the subject. Recent trends to support the concept of spirituality as an emerging research topic across many disciplines, including the business management domain, make up the second part of the review. Once the value of spirituality as a research topic is established, a working definition of spirituality and a theoretical framework is constructed using a series of definitional components from 27 different sources extracted from the literature. This effort comprised the third and fourth
parts of the literature review and is the theoretical foundation for the dissertation research herein. Once the definition is established and a framework constructed, the next part of the chapter covered some advantages and limitations of the proposed relational ideopraxis framework. Finally, the sixth and last part of the literature review, presented an analysis of three other spirituality frameworks that aided in analyzing the potential and limitations of the relational ideopraxis framework.

With the completion of this chapter, the next step in the research process is the design, development, and evaluation of an instrument to measure spirituality using the relational ideopraxis framework. The selection of specific relational behaviors for each relational mode substantiated in this study, and the conversion of these behaviors into a valid and reliable measurement instrument to test the hypothesis of this dissertation are presented in the next chapter.
CHAPTER THREE: METHODOLOGY

The previous chapter offered a review of recent literature on spirituality and management, and laid the foundation for construing spirituality within management as a relational-ideopraxis. In the first part of the chapter, a historical overview of spirituality theory in management is presented, intending to offer a background on the subject. Next, recent trends to support the concept of spirituality as an emerging research topic across many disciplines, including the business management domain, are discussed. Once the value of spirituality as a research topic is established, a working definition of spirituality and a theoretical framework are constructed using a series of definitional components common to 27 selected sources. This effort comprises the third and fourth parts of the literature review and is the theoretical foundation for the dissertation research. Once the definition is established and the framework for spirituality is constructed, the advantages and limitations of the framework are offered. The last part of the previous chapter presents an analysis of opposing frameworks and perspectives of spirituality in business organizational settings.

This chapter offers a detailed account of the research methodology used to operationalize and validate the measurement instrument for testing the hypothesis of this dissertation, namely, that spirituality can be measured as a relational-ideopraxis construct. Specifically, the first section of this chapter presents details of the research design and validation methodology of the measurement instrument, called the Independent Spirituality Assessment Scale (iSAS). An account of the rationale for test
subject selection is offered next, followed by a description of the Independent Spirituality Scale (iSAS) and two other instruments also utilized in the present study, Dr. Hamilton Beazley's Spirituality Assessment Scale©, and Dr. Judy Howden's Spirituality Assessment Scale©. The chapter concludes with a discussion of the constraints and limitations inherent to the present research methodology.

Research Design

The research design presented in this chapter revolves around the null hypothesis of the present study, that spirituality cannot be measured as a relational-ideopraxis construct independent from ideological content. This hypothesis is rejected if:

\begin{align*}
H_{01}: \text{the Independent Spirituality Assessment Scale (iSAS) will not demonstrate normality (} p \leq 0.05). \\
H_{02}: \text{the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity in a moderately large sample (} n > 480, \alpha \geq 0.70). \\
H_{03}: \text{the Independent Spirituality Assessment Scale (iSAS) will not demonstrate stability through a test / re-test correlation (} r \geq 0.90, p \leq 0.05). \\
H_{04}: \text{the Independent Spirituality Assessment Scale (iSAS) will not demonstrate item validity as measured by consensus of a panel of experts.}
\end{align*}
H05: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity ($\alpha_R \geq 0.70$) in a sample of known, robust spirituality persons (robust control group, $n \geq 200$).

H06: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate validity through statistical significance ($p \geq 0.05$) when comparing mean scores between a robust and a fragile spirituality control group.

H07: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate concurrency (correlation) with two other spirituality instruments ($0.30 \leq r \leq 0.60$).

H08: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate denominational bias when comparing mean scores ($p \leq 0.05$) between samples of known high spirituality persons from two different prevalent (U.S.) religious orientations.

H09: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate a ceiling effect (skewness) in measuring spirituality levels among subjects from a robust spirituality control group.

The most appropriate procedure for development and evaluation of an instrument is a "methodological design" which consists of three parts, namely, scale construction,
item crafting, and an analysis of both reliability and validity of the instrument (Kerlinger, 1973; Nunnally, 1978). Accordingly, the instrument development, instrument content reliability and construct validation methodologies are detailed in the subsections that follow.

**Instrument Design**

The first step in the construction of the spirituality measurement scale for the present study was accomplished by creating a test specification table based on the twelve spirituality relational modes (Figure 1) developed earlier in Chapter 2, the Literature Review. The first column of the test specification table in Appendix I lists each of the twelve relational modes as independent variables from which spirituality (dependent variable) is measured. Since a relational mode is defined earlier as a set of behaviors that respond to a specific relational demand, three spirituality-related behaviors are selected from either the definition or from the supporting explicatory theory and are listed in the second column of the table. Next, a suggested questionnaire statement intended to measure different degrees of conformity to each listed behavior is crafted and presented in a third column. In addition to the three statements for each of the twelve relational modes (36 items), three statements are also crafted to measure ideopraxis, for a total of 39 statements generated. The concept of ideopraxis emerges from the analysis of 27 spirituality definitions (Table 2) as one of thirteen definitional components that describe the personal or collective effort to integrate a spiritual worldview into everyday activities. All of these 39 statements are listed on the third column in the Test Specification Table (see Appendix I). A seven point Likert scale for each questionnaire statement was
selected, where “0” represents “Disagree” and a score of “6” means “Agree to the extreme”. All items are carefully crafted to meet the clarity and objectivity guidelines for questionnaire statements (simplicity, minimizing ambiguity, biases, and vague terms) suggested by Rea and Parker (1997), with four of these items worded in negative format to prevent acquiescence response bias (Singleton, Straits & Straits, 1993). The order of items placed on the instrument is determined by using a table of random numbers (Kerlinger, 1973). The sum of scores for each of the 39 items in the instrument is assumed to be representative of the respondent’s degree of spirituality.

A demographics section was added as the cover page of the proposed instrument and was used to collect data on potential modifiers of spirituality. These demographic attributes are based on literature supported modifiers of spirituality, and are added to the instrument for two primary reasons. First, to document the degree of diversity among the sample of respondents, and secondly, as a means to assess the potential impact of biases from possible modifiers of spirituality. Specifically, modifiers of spirituality noted for the present study include age (Hickson, Housley & Wages, 2000), heritage and gender (Dunn & Dawes, 1999; Liebman-Jacobs, 2000; Mercer & Durham, 1999) and education level (Brome, Owens, Allen & Vevaina, 2000). A statement requesting the respondent's years of managerial experience is added to the demographics section as a way to extract a subset of subjects with significant experience in managerial functions, as can be seen later, a crucial step in construct validation.

The resulting instrument is named the Independent Spirituality Assessment Scale (iSAS) in recognition of its non-denominational (ideology independent) character, and is contained in Appendix B. The research designed here was submitted to the Argosy
University Human Subjects Committee for approval prior to the implementation of the research plan. Once the instrument and the research proposal was approved (Appendix C), the next step in the research design was to determine the reliability and validity of the proposed instrument.

A reliability and validity test plan for the Independent Spirituality Assessment Scale (iSAS) was developed to test the hypotheses of the present study, and is presented in Table 4. The first part of the plan tests the Beazley© and Howden© spirituality instruments for homogeneity and normality before using them for validation. Next, the iSAS reliability tests are conducted, which address its normality, homogeneity and stability. The third part of Table 4 describes the plan to test validity, namely, item validity (a statement actually elicits its intended meaning), and construct validity by using control groups and concurrency. Finally, two specific threats to construct validity are addressed, namely, denominational bias and ceiling effects. Once these tests were completed, two additional analyses are conducted: an instrument refinement using a correlation technique and an exploratory factor analysis. It can be noted that the reliability and validity plan follows the same order of the null hypothesis statements (H01 through H09) presented in the earlier part of this chapter. This logical flow facilitates the analysis of the results and the formulation of the conclusions in the following chapters.

**Instrument Reliability Methodology**

As presented in Table 4, reliability of the iSAS is tested through normality (H01), homogeneity (H02) and stability (H03). Normality refers to the degree in which the
Table 4.
Reliability and Validity Plan

<table>
<thead>
<tr>
<th>Type test</th>
<th>Test method</th>
<th>$H_0$ thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-requisites &amp; Assumptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homogeneity (Beazley©)</td>
<td>Cronbach’s Alpha</td>
<td>$\geq 0.70$</td>
</tr>
<tr>
<td>Normality (Beazley©)</td>
<td>Kolmogorov-Smirnov</td>
<td>$p \geq 0.05$</td>
</tr>
<tr>
<td>Homogeneity (Howden©)</td>
<td>Cronbach’s Alpha</td>
<td>$\geq 0.70$</td>
</tr>
<tr>
<td>Normality (Howden©)</td>
<td>Kolmogorov-Smirnov</td>
<td>$p \geq 0.05$</td>
</tr>
<tr>
<td>iSAS Reliability tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H01) Normality (n $\geq 200$)</td>
<td>Kolmogorov-Smirnov</td>
<td>$p \geq 0.05$</td>
</tr>
<tr>
<td>(H02) Homogeneity (n $&gt; 480$)</td>
<td>Cronbach’s Alpha</td>
<td>$\geq 0.70$</td>
</tr>
<tr>
<td>(H03) Stability (n $\geq 32$)</td>
<td>Correlation, test/re-test</td>
<td>$r \geq 0.90$</td>
</tr>
<tr>
<td>iSAS Validity tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H04) Item validity</td>
<td>Panel of experts</td>
<td>Consensus</td>
</tr>
<tr>
<td>Construct validity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H05) Robust (n $\geq 200$)</td>
<td>Homogeneity</td>
<td>$\alpha \geq 0.80$</td>
</tr>
<tr>
<td>(H06) Fragile (n $\geq 40$)</td>
<td>t-test (fragile &amp; robust)</td>
<td>$p \leq .05$</td>
</tr>
<tr>
<td>(H07) Concurrency (n $\geq 100$)</td>
<td>Howden© Instrument</td>
<td>$0.3 \geq r_H \geq 0.6$</td>
</tr>
<tr>
<td>(H07) Concurrency (n $\geq 100$)</td>
<td>Beazley© Instrument</td>
<td>$0.3 \geq r_B \geq 0.6$</td>
</tr>
<tr>
<td>Threats to iSAS construct validity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H08) Denominational bias (n $\geq 45$)</td>
<td>t-test</td>
<td>$p \leq .05$</td>
</tr>
<tr>
<td>(H09) Ceiling effect (n $\geq 200$)</td>
<td>Skeweness</td>
<td>$-0.5 \leq s \leq 0.5$</td>
</tr>
</tbody>
</table>
data collected from the instrument represents a normal distribution, a crucial assumption for statistical analysis (Hair, et.al., 1998). Normality here is calculated by using the Kolmogrov-Smirnov test with Lilliefors correction, since the mean and variance are not known, and sample estimates are used (SPSS Base 9.0 Applications Guide, 1999). According to this test, if \( p \leq 0.05 \) then the null hypothesis of normality is accepted (the distribution is *not* normal).

Next, homogeneity refers to the degree in which a measurement represents a single construct and is measured by Cronbach’s Alpha (\( H_{02} \)), where a minimal of 0.70 (\( p \leq 0.05 \)) is considered acceptable (Leedy, 1997). Note that the thresholds for the assumptions of normality and homogeneity of the Beazley© and Howden© instruments in the Pre-requisites and Assumptions section of Table 4 are the same as expected from the iSAS (\( H_{02} \)).

The final test of this section on reliability was instrument stability, using a test-retest measurement. For this test (\( H_{03} \)), the iSAS is administered twice to the same sample (\( n \geq 32 \)) with a minimal two week interval (14 days), and is calculated by using correlation (Pearson) as the reliability index (Ravid, 1994). The threshold for stability of the iSAS in the present study was established at \( r \geq 0.90 \) (\( p \leq 0.05 \)).

**Instrument Validity Methodology**

The methods for gathering evidence of instrument validity traditionally consist of two categories: item validity and construct validity (Leedy, 1997). Item validity is concerned with the degree to which the items in the questionnaire are representative of its
intent (Churchill, 1979; Nunnally, 1978). Item validity for the iSAS (H04) was established upon consensus within the panel of experts. Since the spirituality relational-ideopraxis construct consists of three distinct aspects (intrapersonal, suprapersonal and interpersonal), item validity was established by consulting three separate panels of experts. First, the panel to assess statements intended to measure relational behaviors within the intrapersonal aspect consisted of three professional psychologists from the Tampa Bay area, who classified each intrapersonal item on the questionnaire as acceptable, acceptable as modified, or unacceptable. Similarly, the items relating to the suprapersonal aspect are evaluated by a panel of accredited clergy with experience in spiritual direction and applied spirituality. Finally, since the contextual interest of the interpersonal aspects of spirituality was thought to be associated with the potential use within the business environment, a panel of experienced managers with expected high levels of spirituality were sought to validate the items of this third aspect (interpersonal).

To ensure overall coherency and as a secondary objective, each panel of experts was also asked to comment on the remaining items of the instrument (Appendix I).

The second validity test in Table 4, construct validity, was concerned with whether one was measuring an underlying construct or an actual theoretical entity (Kerlinger, 1978), in this case, spirituality through a relational-ideopraxis construct. As shown in Table 4, construct validity is measured by using four tests: homogeneity ($\alpha_R \geq 0.80$) within a known, robust spiritually control group (H05), a t-test ($p \leq 0.05$) comparing scores between robust and fragile spirituality samples (H06), and by establishing concurrency with two other spirituality instruments (H07), the Beazly© ($0.30 \geq r_B \geq 0.60$) and Howden© ($0.30 \geq r_H \geq 0.60$) scales.
Only one more section of Table 4 remains to be discussed, namely, two potential threats to construct validity which are described in the literature as common among spirituality instruments. These are denominational bias and ceiling effects (McMinn, 2001). Denominational bias has been reported in empirical tests comparing Protestants and Catholics using the Spiritual Well-Being Scale, the Spiritual Maturity Index and the Faith Maturity Scale (McMinn, 2001), and if not addressed here, it could have had a detrimental effect on the validity of the Independent Spirituality Assessment Scale (iSAS). Given the significance of this bias, test scores from samples of both these denominations (Protestant and Catholic) were tested (t-test). It was hypothesized (H08) that there was not a significant difference (p ≤ 0.05) between scores of highly spiritual Protestant and Catholic subjects.

The last item of this section and of Table 4 addresses “ceiling effects” (skewed distribution), another bias common to spirituality instruments (McMinn, 2001). Ceiling effects are noted if the value of skewness is above an absolute value of 0.50 (McMinn, 2001), which is also the threshold for the present study (H09).

The target population for the formal study consisted of approximately 1,200 subjects with expected robust spirituality levels (clergy, clergy spouses or subjects selected by clergy) from seven major metropolitan cities in five states. The instrument was administered by mail and contained a cover letter with a statement of purpose, a statement of informed consent (Appendix A), and instructions on how to fill out and return the research packet. Each packet contained a copy of the Independent Spirituality Assessment Scale (iSAS) with a control number (for research accountability purposes only), and either (split sample) the Beazley (1997) or Howden (1992) instrument. This
way, at least theoretically, each half of the population would also serve as subjects to test concurrency with the Beazley© and Howden© instrument. The respondents were informed after they responded that they were able to view the survey results from a web page location (http://www.prismleadership.com) owned by the researcher. It is anticipated that the hypothesis tests for the iSAS would be conducted from a pool of at least 480 respondents, which represents an estimated 40% response rate (1, 200 subjects initially contacted).

Among the most decisive tests for the iSAS are homogeneity (H$_{01}$) and validity (H$_{06-07}$). Although strict guidelines of minimum sample sizes for instrument validation do not exist (Anderson & Gerbing, 1988), samples of at least 200 subjects are considered sufficient to meet the minimum recommended by Boomsma (1982). Other sources suggest a sample size to parameter ratio of at least 5:1 for reliable maximum likelihood estimation (Bentler, 1985), which for 39 items represents at least 195 subjects, another indication of the adequacy here of a sample size of at least 200 subjects. Different sample sizes required for each test of the hypotheses were drawn from the data pool. Specific hypotheses testing for H$_{01}$ (normality) and H$_{05-07}$ (validity) required a robust control group ($n \geq 200$), which was obtained by sorting all respondents ($n \geq 480$) and retaining those with college degrees (Associate, Undergraduate, Graduate) and with five or more years experience in management positions.

Having addressed the more decisive tests for the iSAS, it was essential to also discuss the sample size selections for the remainder of the reliability and validity tests contained in Table 4.
The reliability test of homogeneity (H02) for the iSAS was performed with all respondents (n >480), while for the test of stability (H03), a sample of 80 subjects was selected from the cities of two different states with the expectation that at least 40% would respond (n ≥ 32). As stated earlier, the sample for H04 consisted of the panel of 12 experts. The tests for H05 and H06 made use the control group, which was previously discussed. For H05, homogeneity was tested again, to ensure the instrument held together with the control group. Next, hypothesis H06 (the first construct validity test) required a sample of subjects with expected fragile spirituality to be compared against this control group. The literature suggested that participants of 12 Step Programs (recovery from substance abuse) typically represent subjects with fragile spirituality (Green, Fullivove & Fullilove, 1998; Sandoz, 1999; White, Wampler & Fischer, 2001). To meet this requirement, the researcher sought volunteers from at least two different 12 Step Programs in a major metropolitan area in Florida (n ≥ 40). For H07 (concurrency validation), the researcher would calculated correlation between the iSAS and two other instruments, provided the sample sizes for each concurrency test (Beazley© and Howden©) exceeded 200 subjects (the minimal threshold stated earlier). Next, H08 consisted of a test for denominational bias (t-test), for which a sample of various Protestant denominations (n ≥ 45) are compared with a set of Catholic subjects randomly selected from the robust control group (n = 50). Finally, the sample for H09 (ceiling effect) was conducted by calculating skewness in the robust control group (n ≥ 200).

All of the reliability and validity test calculations mentioned above were conducted using SPSS Ver 9.0 software.
In this section, the researcher has addressed the design and testing of the Independent Spirituality Assessment Scale (iSAS), namely, the instrument development, instrument content, instrument reliability, and the construct validation methodologies. The next logical step was to offer a more in-depth view of the criteria used to select the subjects.

Selection of Subjects

The present study required a variety of subjects for the development and validation of the Independent Spirituality Assessment Scale (iSAS). Specifically, subjects were required for three independent expert panels and for the formal study. The selection of these subjects was based on a series of criteria designed to ensure relevance to the present study (Rea & Parker, 1997). The selection criteria for each of these subject groups are illustrated in Table 5 and discussed in the next paragraphs.

As stated earlier, the relational-ideopraxis construct consists of three distinct aspects (intrapersonal, suprapersonal and interpersonal), for which content validity was established by consulting three separate panels of experts, one panel for each aspect. The first panel assesses statements intended to measure relational behaviors within the intrapersonal aspect (primarily the domain of psychology), and consisted of three professional psychologists and one licensed counselor who classified each intrapersonal item on the questionnaire as acceptable, acceptable as modified, or unacceptable. Similarly, the items relating to the suprapersonal aspect (primarily the domain of theology) were evaluated by a panel of accredited clergy trained in spiritual direction and
Table 5.

**Sampling plan for testing the reliability and validity of the iSAS**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Sample Size</th>
<th>Source of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_{01}$</td>
<td>$n \geq 200$</td>
<td>Sort for a robust control group from all valid responses</td>
</tr>
<tr>
<td>$H_{02}$</td>
<td>$n \geq 480$</td>
<td>Calculate using all valid responses received ($N = 1,200$)</td>
</tr>
<tr>
<td>$H_{03}$</td>
<td>$n \geq 32$</td>
<td>Mail test/retest instrument to 60 subjects</td>
</tr>
<tr>
<td>$H_{04}$</td>
<td>$n = 14$</td>
<td>Consensus by panels of experts</td>
</tr>
<tr>
<td>$H_{05}$</td>
<td>$n \geq 200$</td>
<td>Use same robust control group as in $H_{01}$</td>
</tr>
<tr>
<td>$H_{06}$</td>
<td>$n \geq 40$</td>
<td>Instrument given to 60 subjects from 12 Step Programs. Randomly sample a comparable sample size from the robust control group and compare scores</td>
</tr>
<tr>
<td>$H_{07}$</td>
<td>$n \geq 100$</td>
<td>For each instrument mailed ($N = 1,200$) include also either a Beazley© or Howden© instrument</td>
</tr>
<tr>
<td>$H_{08}$</td>
<td>$n \geq 45$</td>
<td>Instrument mailed to 60 subjects (Protestants) with expected robust spirituality. Randomly sample a comparable sample size from the robust control group, and compare scores</td>
</tr>
<tr>
<td>$H_{09}$</td>
<td>$n \geq 200$</td>
<td>Use same robust control group as in $H_{01}$</td>
</tr>
</tbody>
</table>
applied spirituality. Finally, since the contextual interest of the interpersonal aspects of spirituality is associated with management theory, a team of experienced managers with perceived robust spirituality levels (selected by a panel of clergy that had known the panel members for at least 5 years) was sought as members of the third panel. To ensure overall coherency and as a secondary objective, each of the three panels of experts was also asked to comment on the remaining items of the instrument.

For the formal study, a sample of subjects with robust spirituality levels was sought to test the reliability and validity of the assessment scale. Specifically, a convenience sample of 1,200 clergy and their spouses from seven major metropolitan areas within five states was sought. The robust sample required for validity testing was extracted from this pool of data. On the other hand, since hypothesis H06 (validity test) required a sample of subjects with expected fragile spirituality and as suggested by the literature (Green, Fullivove & Fullilove, 1998; Sandoz, 1999; White, Wampler & Fischer, 2001), the researcher sought volunteers from two different 12 Step Programs (Alcoholics Anonymous and Narcotics Anonymous) in a major metropolitan area in Florida (n ≥ 40). These subjects were offered monetary compensation as an incentive to volunteer as subjects. Finally, a sample of robust spirituality individuals from mixed Protestant denominations (n ≥ 45) were compared to a sample of randomly selected Catholic subjects (n = 50) from the robust control group (H08) to test for denominational bias. Finally, the robust spirituality control group was also used to test for ceiling effects (H09).

The institutional authorizations required to conduct the research (Appendix H), as well as the approval from the Human Subjects Committee of Argosy University (Appendix C) are found among the appendices to the present study.
This section addressed the attributes and selection criteria of the subjects recruited for the validation of the Independent Spirituality Assessment Scale (iSAS). Having presented the selection methods for the test subjects, the next step was to offer a comprehensive analysis of the instruments used in the present study, which is the topic of the next section.

Instrumentation

For the present study, three spirituality assessment scales were used with two different objectives. First, the Independent Spirituality Assessment Scale (iSAS) was developed with the objective of testing the hypotheses of the present study, namely, that spirituality can be measured as a relational-ideopraxis concept. The two remaining scales, one by Beazley (1997) and the other by Howden (1992), were chosen from a list of 16 spirituality scales evaluated (Appendix K), and were used to test the construct validity of the Independent Spirituality Assessment Scale (iSAS). Each of the three instruments mentioned above are described in the next paragraphs.

The Independent Spirituality Assessment Scale (iSAS) was developed as a means to evaluate spirituality as a relational ideopraxis construct. The relational-ideopraxis concept is defined as a way to integrate a spiritual worldview (ideology) into everyday activities through an alternative human developmental process (adult learning) framed against relational attributes. The construct consists, to date, of a series of thirteen independent variables also known as relational modes. As presented earlier, a relational mode is a conforming arrangement of personal behaviors selected as a response to a
contextual, relational demand. For each of these relational modes, three specific behaviors are operationalized into survey statements (see the Test Specification Table, Appendix I for the developmental process map for each statement), where the statements were subject to item validation through panels of experts. Construct validity was demonstrated through concurrency with two other spirituality instruments, and internal validity was estimated using Cronbach's Alpha. Scores of spirituality were obtained as the total sum of points obtained through the Likert responses, with "0" meaning "Disagree" and "6" a "Agree in the extreme". Four of the 39 items are expressed in the negative format to avoid acquiescence responses (Singleton, Straits & Straits, 1993). A demographics section was added to account for known spirituality modifiers, specifically, age (Hickson, Housley & Wages, 2000), heritage and gender (Dunn & Dawes, 1999; Liebman-Jacobs, 2000; Mercer & Durham, 1999) and education level (Brome, Owens, Allen & Vevaina, 2000). A statement requesting the respondent's years of managerial experience was added also as a means to assess potential relationships between spirituality components and managerial experience.

In a critique of instruments pertinent to this study, McMinn (2001) notes that religious bias, ceiling effect, and social desirability are flaws common to spirituality scales. Religious bias represents a difference in responses for subjects with comparable spirituality levels but from different religious denominations. Such bias has been observed between Protestants and Catholics using either the Spiritual Well Being Scale (SWBS) or the Spiritual Maturity Index (SMI) (McMinn, 2001). The second threat mentioned by McMinn (2001) is a ceiling effect, an indication of a skewed population distribution and a violation of statistical assumptions, specifically the assumption of
normality. Regarding social desirability, McMinn (2001) notes that this type of threat is typically minimized by allowing subject anonymity.

These threats were thought to be carefully addressed in the methodological design of the Independent Spirituality Assessment Scale (iSAS) already presented in Table 4. First, religious bias is minimized in two ways by having the panel of experts conducting item validity for the suprapersonal aspect as all Protestants (no Catholics) and by having the instrument validity and reliability tested ($H_{08}$) with subjects from only a Catholic population (Catholic clergy and spouses). To lessen ceiling effects, the Likert scales omit degrees of disagreement and focus more on levels of agreement (from "Agree" to "Agree to the Extreme") thereby expanding the upper portion of the scale. A measurement coefficient of skew with an absolute value of less than 0.50 was established as the threshold for this bias. (McMinn, 2001). The final threat to validity, social desirability, was though to be minimized by allowing anonymity of responses, as suggested by McMinn (2001). With these enhancements incorporated into the methodological design of the iSAS, it was expected that the instrument would be sufficiently protected against these common spirituality scale threats.

As stated earlier, construct validity for the Independent Spirituality Assessment Scale (iSAS) was established by correlating scores with two other instruments. These instruments were chosen from a list of 16 scales analyzed for three specific reasons: their robust psychometric properties, their non-religious or non-denomination character, and the availability of empirical studies by researchers other than their authors (Fanning, 1998; Strack, 2001). In the next paragraphs, a brief description of each of these two other instruments is offered.
The first of two instruments used in the present study for construct validation is developed by Beazley (1997). In his study on spirituality measured as an attitude, Beazley (1997) operationalized spirituality as two definitive dimensions (living the faith relationship with the Transcendent, and prayer & meditation) and three correlated dimensions (service to others, humility, and honesty). The original instrument consisted of 70 items, for which 33 items reflected spirituality when answered in the positive, 32 statements reflected spirituality when answered in the negative form, and 5 were designed to be equally favorable and unfavorable. Content validity was established by using Thurstone judges (n=13). An Alpha reliability coefficient (homogeneity of items) of 0.88 and higher was achieved with a simplified instrument of 30 items, using 332 subjects. Recognized modifiers of spirituality using this instrument included age, gender, and cultural orientation. Authorization from Dr. Beazley to use his Spirituality Assessment Scale© for the present study is contained in Appendix D.

The second of two instruments used in the present study for concurrent validation was the Spirituality Assessment Scale ©, developed by Howden (1992). This scale was created as a response to less thorough (primarily unidimensional) instruments for measuring spirituality (Fanning, 1998). In her study, a model was derived from the literature based on four prevalent attributes of spirituality. These four attributes were Unifying Interconnectedness, Purpose and Meaning in Life, Innerness or Inner Resources, and Transcendence (Howden, 1992). The final version of the instrument consisted of 28 statements rated from "1" (Strongly Disagree) to "6" (Strongly Agree), with construct validity established by a panel of seven experts. The overall Alpha coefficient for the 28-item instrument was 0.92, and the Alpha coefficients for the
subscales were 0.91 for Purpose and Meaning in Life, 0.79 for Innerness, 0.80 for Interconnectedness, and 0.71 for Transcendence. Modifiers for these four attributes included age, marital status, income and situational factors, such as a crisis event and state of health (Stanard, Sandhu & Painter, 2000). As a major strength, the instrument was found to be capable of measuring spirituality regardless of religious background. However, a weakness of this instrument is its limited independent sources of validation, other than the developer. Authorization from Dr. Judy Howden to use her instrument for the present study is contained in Appendix E.

So far, this chapter has presented the research design, selection of subjects and the attributes of the spirituality scales used. The last part of this chapter addresses the methodological assumptions and limitations of the research design.

Methodological Assumptions and Limitations

In Chapter 2 of the present study, the theoretical foundation for the relational ideopraxis construct was established, for which the theoretical assumptions and limitations of the construct were discussed. Since this chapter describes the research methodology used, it was appropriate here to discuss the assumptions and limitations pertaining to the methodology selected.

Three assumptions were fundamental to the research methodology here conducted. The first assumption was that significant errors in the development of the spirituality instrument were successfully minimized by the extensive literature review and the reviews conducted by the three panels (intrapersonal, suprapersonal, interpersonal) of
experts. Secondly, it was assumed that by selecting robust spiritual subjects, the optimal properties and potential of the Independent Spirituality Assessment Scale (iSAS) could be demonstrated. In other words, it was assumed that the data collected from the convenience samples (non-random) were sufficiently representative of the attributes (relational modes) under scrutiny. Finally, in seeking a population with expected robust spirituality levels, this researcher chose to target clergy and clergy spouses as test subjects. Although there may be specific cases to the contrary, the researcher assumes that clergy and their spouses are encouraged by their training, continued education and follower expectations to maintain higher than average levels of spirituality.

In addition to the assumptions outlined above, the present study contained a series of constraints thought to be originating from three primary sources in which the research was conducted, namely, instrumentation, sampling, and environmental factors. Limitations of the present instrument include a potential carryover of unspecified biases and limitations existing in the Beazley (1997) and Howden (1992) scales. Regarding sample constraints and as stated earlier, the subjects sought represented a convenience (rather than an entirely random) sample, with a homogeneous ideology and worldview (Christian perspective). Next, the interpretation of the phrase "…at work or elsewhere…” in the questionnaire interjects a degree of ambiguity, and may reflect more the religious organization each subject belongs to, instead of a clear association with the organization where the subject works. However, the researcher believes that the measurements associated with small groups and organizations in the intrapersonal relational mode (within a relational-ideopraxis context) may have relevance in understanding the effects of spirituality at work and in formulating specific programs to harvest its benefits.
Finally, environmental conditions may also introduce biases into the study that are, in the researchers' opinion, hard to assess. Some authors identify a change in national spiritual "mood" after the tragic events of September 2001 (Briggs, 2001; Wickens, Macqueen & McClelland, 2001), events that occurred during the same period the instruments were being administered and for which the researcher currently has no way to moderate.

In summary, a detailed account of the research methodology used to construct and validate the measurement instrument for testing the hypothesis of this dissertation was presented in this chapter. The first section offered details of the research design, including the development, validation and pilot testing methodology of the measurement instrument. Following the details of instrument development, the rationale for test subject selection were presented. After the characterization of test subjects, an analysis of the Independent Spirituality Assessment Scale (iSAS) and the two instruments used for construct validity were described. Finally, the last topic of this chapter was a discussion of the constraints and limitations of the present research design.

With the conclusion of Chapter 3, the Research Methodology, the presentation of the experimental design was complete. The next portion of the present study offers a detailed account of the research findings.
CHAPTER FOUR: FINDINGS

In this chapter, the findings are described. First, a description of the sample to test the various hypotheses was offered, followed by a presentation of the demographic characteristics of the sample obtained. Third, the results of the statistical analyses and hypotheses tests were reported using the thresholds stated in the chapter on research methodology are offered. The present chapter ends with two additional analyses of the Independent Spirituality Assessment Scale (iSAS), namely a questionnaire simplification technique using item correlation and an exploratory factor analysis.

Restatement of the Purpose

The purpose of the present study is to extract from a literature review the theoretical foundations for a relational-ideopraxis framework, operationalize the framework into an instrument, and then test its validity and reliability. This instrument, intended to measure spirituality regardless of denominational, religious or ideological preference, is called the Independent Spirituality Assessment Scale (iSAS) and is based on thirteen relational modes extracted from the literature review of Chapter Two. Said differently, the validation of the Independent Spirituality Assessment Scale (iSAS) would confirm that spirituality can be measured as a relational-ideopraxis construct, independent of denomination or religious affiliation. In null format, the present study
posited that spirituality as a relational-ideopraxis construct independent from ideological content would be rejected if:

H₀₁: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate normality ($p \leq 0.05$).

H₀₂: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity in a moderately large sample ($n > 480, \alpha \geq 0.70$).

H₀₃: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate stability through a test / re-test correlation ($r \geq 0.90, p \leq 0.05$).

H₀₄: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate item validity as measured by consensus of a panel of experts.

H₀₅: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate homogeneity ($\alpha_R \geq 0.70$) in a sample of known, robust spirituality persons (robust control group, $n \geq 200$).

H₀₆: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate validity through statistical significance ($p \geq 0.05$) when comparing mean scores between a robust and a fragile spirituality control group.
H_{07}: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate concurrency (correlation) with two other spirituality instruments (0.30 ≤ r ≤ 0.60).

H_{08}: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate denominational bias when comparing mean scores (p ≤ 0.05) between samples of known high spirituality persons from two different prevalent (U.S.) religious orientations.

H_{09}: the Independent Spirituality Assessment Scale (iSAS) will not demonstrate a ceiling effect (skewness) in measuring spirituality levels among subjects from a robust spirituality control group.

The null hypotheses stated above are initially presented in Chapter One are also summarized in Table 4, the Reliability and Validity Plan for the Independent Spirituality Assessment Scale, previously presented in Chapter Three.

Having restated the purpose of the present study, the next section discusses the process for finding test subjects and the results of the search.

Description of the Sample

Approximately 1,200 individuals from seven different major metropolitan areas of southern and central United States were approached for the present study. The major metropolitan areas were from the states of Louisiana (1), Texas (1), Georgia (1), Missouri
(1), and Florida (3). All subjects from these cities were mailed a copy of the Independent Spirituality Assessment Scale (iSAS) along with a copy of either the Beazley© or Howden© instruments (random split sample), or another copy of the iSAS (test-retest). These subjects represent individuals with an expected high spirituality level (either clergy, clergy spouses or identified by clergy as a spiritual subject) which represented the target audience required to test the hypotheses (H01-H09).

The overall response rate, as well as the response rate by state, is presented in Table 6. It can be seen here that a total of 1,229 forms were mailed out from which 508 were returned usable, representing an overall response rate of 41%. Despite the variety of response rates by major metropolitan area (between 25%- 85%), the researcher was able to obtain sufficient subjects to exceed the minimal requirement of no less than 480 subjects (see H02). From the 508 returned survey forms, the researcher was able to obtain 114 Beazley© forms, and 220 Howden© completed instruments for concurrency validation (H07).

Additional subjects were also sought to meet the particular test requirements for other null hypothesis statements. Specifically, H03 requires a sample of subjects for which the iSAS is administered twice (test / retest) with at least a 14-day time frame in between administrations. Of the 508 subjects, 80 were selected from the Missouri and Florida metropolitan areas to meet this requirement. Next, hypotheses H05, H06 and H09 require a robust spirituality control group (n >200), which was obtained by sorting out subjects with college degrees (Associate, Undergraduate or Graduate) and with 5 or more years of management experience from the total forms received (n = 508). This criteria was earlier established as the baseline for a robust control group (robust spirituality with college
Table 6.

Response Rate of the Study Sample

<table>
<thead>
<tr>
<th>Major Metro Area</th>
<th>Sent</th>
<th>Returned Usable</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>180</td>
<td>50</td>
<td>28%</td>
</tr>
<tr>
<td>2</td>
<td>79</td>
<td>61</td>
<td>77%</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>57</td>
<td>57%</td>
</tr>
<tr>
<td>4</td>
<td>125</td>
<td>48</td>
<td>38%</td>
</tr>
<tr>
<td>5</td>
<td>441</td>
<td>169</td>
<td>38%</td>
</tr>
<tr>
<td>6</td>
<td>287</td>
<td>72</td>
<td>25%</td>
</tr>
<tr>
<td>7</td>
<td>60</td>
<td>51</td>
<td>85%</td>
</tr>
<tr>
<td>Total</td>
<td>1,229</td>
<td>508</td>
<td>41%</td>
</tr>
</tbody>
</table>
degree and management experience). In H06, a sample of subjects with expected fragile spirituality was required. To meet this requirement, the researcher was able to obtain volunteers from two separate 12 Step Programs (Alcoholics Anonymous and Narcotics Anonymous) in a major metropolitan area in Florida (n = 46). As noted earlier in this study, the literature suggested that participants of 12 Step Programs typically represent subjects with a fragile spirituality (Green, Fullivove & Fullilove, 1998; Sandoz, 1999; White, Wampler & Fischer, 2001). Regarding H08 (test for denominational bias), the researcher was able to obtain subjects of various Protestant denominations (n = 45) that are compared with a sample of randomly selected Catholic subjects (n = 50) from the spiritually robust control group (n = 234). Finally, for H09 (ceiling effect), skewness was measured using the robust control group.

Upon completing this discussion on restating the purpose of the present study and characterizing the subjects selected, what follows is an analysis of the respondent's demographic attributes.

Summary of Demographic Data

The demographic characteristics of the respondents are presented in Table 7. Of the 508 respondents, 324 (64%) were male and 184 (36%) were female. Although the largest age group is represented by subjects that were 61 years or older (42%), it can be noted that 83% of the respondents (n = 508) are over the age of 41. Those with graduate degrees represent the largest group within the educational demographic variable (154, 30%) followed by those with high school diploma (134, 26%). About 66% of the sample
Table 7.

Demographic Characteristics of Respondents

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Respondents</th>
<th>Percent (N = 508)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>324</td>
<td>64%</td>
</tr>
<tr>
<td>Female</td>
<td>184</td>
<td>36%</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 21</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>21 - 30</td>
<td>27</td>
<td>5%</td>
</tr>
<tr>
<td>31-40</td>
<td>54</td>
<td>11%</td>
</tr>
<tr>
<td>41 - 50</td>
<td>88</td>
<td>17%</td>
</tr>
<tr>
<td>51 - 60</td>
<td>121</td>
<td>24%</td>
</tr>
<tr>
<td>61 or over</td>
<td>215</td>
<td>42%</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>134</td>
<td>26%</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>124</td>
<td>24%</td>
</tr>
<tr>
<td>Vocational</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>Associate</td>
<td>59</td>
<td>12%</td>
</tr>
<tr>
<td>Graduate</td>
<td>154</td>
<td>30%</td>
</tr>
<tr>
<td>None</td>
<td>13</td>
<td>3%</td>
</tr>
</tbody>
</table>
Table 7. (Continued)

Demographic Characteristics of Respondents

<table>
<thead>
<tr>
<th>Cultural Heritage</th>
<th>Respondents</th>
<th>Percent (N = 508)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>381</td>
<td>75%</td>
</tr>
<tr>
<td>European</td>
<td>32</td>
<td>6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>51</td>
<td>10%</td>
</tr>
<tr>
<td>African American</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in Management Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>1 - 9</td>
</tr>
<tr>
<td>10 - 20</td>
</tr>
<tr>
<td>21 - 30</td>
</tr>
<tr>
<td>Over 30</td>
</tr>
</tbody>
</table>
have some type of college degree and only 3% indicated no education whatsoever. The majority of the subjects were of Caucasian-American heritage (381, 75%), followed by Hispanic (51, 10%), European (32, 6%) and African-American heritages (24, 5%). More than half of the respondents had 10 or more years of management experience (279, 55%).

Results

The results from the statistical analysis of the sample of subjects (n = 508) using SPSS © Ver 9.0 are divided into four parts, and are also summarized in Table 8, the Reliability and Validity Results for the Independent Spirituality Assessment Scale (iSAS). The first part of this table presents the findings related to the homogeneity and normality for the Beazley© and Howden© spirituality instruments. If normality and homogeneity were not established for these instruments, the tests of concurrency with the iSAS may have been statistically invalid. Next, the iSAS reliability test (H01 - H03) findings are presented, which address normality, homogeneity and stability. The third part of this chapter describes the findings related to item validity (H04) and construct validity (H05 - H07) using the control groups (fragile and robust) and concurrency. The last section in Table 8 presents two specific threats to the iSAS construct validity, namely, denominational bias and ceiling effects (H08, H09). Once all of these findings are presented, the chapter draws to a close with two additional analyses of the iSAS, namely, a questionnaire refinement approach using an item correlation technique and an exploratory factor analysis of the iSAS.
Table 8.

Reliability and Validity Results for the iSAS©

<table>
<thead>
<tr>
<th>Type test</th>
<th>Test method</th>
<th>H₀ thresholds</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-requisites &amp; Assumptions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homogeneity (Beazley©)</td>
<td>Cronbach’s Alpha</td>
<td>≥ 0.70</td>
<td>α = 0.30</td>
</tr>
<tr>
<td>Normality (Beazley©)</td>
<td>Kolmogorov-Smirnov</td>
<td>p ≥ 0.05</td>
<td>p = 0.09</td>
</tr>
<tr>
<td>Homogeneity (Howden©)</td>
<td>Cronbach’s Alpha</td>
<td>≥ 0.70</td>
<td>α = 0.89</td>
</tr>
<tr>
<td>Normality (Howden©)</td>
<td>Kolmogorov-Smirnov</td>
<td>p ≥ 0.05</td>
<td>p = 0.20</td>
</tr>
<tr>
<td><strong>iSAS Reliability tests</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H₀₁) Normality (n = 234)</td>
<td>Kolmogorov-Smirnov</td>
<td>p ≥ 0.05</td>
<td>p = 0.20</td>
</tr>
<tr>
<td>(H₀₂) Homogeneity (n = 508)</td>
<td>Cronbach’s Alpha</td>
<td>≥ 0.70</td>
<td>α = 0.88</td>
</tr>
<tr>
<td>(H₀₃) Stability (n = 40)</td>
<td>Correlation, test/re-test</td>
<td>r ≥ 0.90</td>
<td>r = 0.92</td>
</tr>
<tr>
<td><strong>iSAS Validity tests</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H₀₄) Item validity (n = 14)</td>
<td>Panel of experts</td>
<td>Consensus</td>
<td>14/14</td>
</tr>
<tr>
<td><strong>Construct validity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H₀₅) Robust (n = 234)</td>
<td>Homogeneity</td>
<td>α ≥ 0.80</td>
<td>α = 0.88</td>
</tr>
<tr>
<td>(H₀₆) Fragile (n = 46)</td>
<td>t-test (fragile &amp; robust)</td>
<td>p ≤ .05</td>
<td>p = 0.001</td>
</tr>
<tr>
<td>(H₀₇) Concurrency (n=220)</td>
<td>Howden© Instrument</td>
<td>0.3 ≥ r₁ ≥ 0.6</td>
<td>r = 0.53</td>
</tr>
<tr>
<td>(H₀₇) Concurrency (n=113)</td>
<td>Beazley© Instrument</td>
<td>0.3 ≥ r₂ ≥ 0.6</td>
<td>r = 0.31</td>
</tr>
<tr>
<td><strong>Threats to iSAS construct validity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H₀₈) Denominational bias (n = 45)</td>
<td>t-test</td>
<td>p ≤ .05</td>
<td>p = 0.71</td>
</tr>
<tr>
<td>(H₀₉) Ceiling effect (n = 234)</td>
<td>Skeweness</td>
<td>-0.5 ≤ s ≤ 0.5</td>
<td>s = -0.29</td>
</tr>
</tbody>
</table>
In general, the iSAS score for all respondents averaged 148.2 (SD = 27.0), with a minimal score of 64 and a maximum score of 218 (Range = 154). The variance of this sample was 733.54, skewness was -0.214, and kurtosis was -0.406.

Pre-requisites and Assumptions

In looking at the first part of the Reliability and Validity Results (Table 8), the pre-requisites and assumptions in using the Beazly© and Howden© spirituality instruments were addressed first. In order for accurate statistical comparisons to be made with these instruments, homogeneity (Cronbach's Alpha) and normality (using Kolmogronov-Smirnov's test with Lilliefors significance correction) were tested for each instrument. The Beazley© instrument shows homogeneity at $\alpha_B = 0.30$, (n = 113, with one outlier) and passes the normality test with $p = 0.09$. In the case of the Howden© instrument, the homogeneity figure ($\alpha_H$) was 0.89 (n = 220) and normality was calculated at $p = 0.20$. Both instruments meet the established thresholds for normality and homogeneity.

iSAS Reliability Tests

The second part of Table 8 presents three reliability tests for the Independent Spirituality Assessment Scale (iSAS), namely, normality ($H_{01}$), homogeneity ($H_{02}$) and stability ($H_{03}$). The Kolmogronov-Smirnov test, with Lilliefors significance correction for the iSAS was $p = 0.20$ (n = 234), which resulted in rejection of the null hypothesis and
suggests that the data does conform to a normal distribution. Having demonstrated normality, the next reliability test on the iSAS was for homogeneity. The results of all the valid collected survey forms (n = 508) show a Cronbach's Alpha ($\alpha$) of 0.88 for the iSAS, which the rejects $H_{02}$ hypothesis (the iSAS would fail homogeneity). Finally, the stability of the iSAS was demonstrated by conducting a test-retest correlation with a two-week interval between interventions. With 80 subjects contacted and 40 responses, the Pearson's correlation was $r = 0.92$, resulting in the rejection of $H_{03}$ (the iSAS would not be stable). These results suggest that the iSAS conforms to a normal distribution, demonstrates robust homogeneity on a large sample (n = 508), and it demonstrates sound stability.

**iSAS Validity Tests**

The third part of this chapter (and as noted in Table 8) details the results of the construct validity tests of the Independent Spirituality Assessment Scale (iSAS), namely item validity ($H_{04}$), and the three tests of construct validity ($H_{05}$ through $H_{07}$) with the robust and fragile spirituality control groups (t-test) and concurrency with the Howden and Beazley scales.

As can be seen in Table 8 (Reliability and Validity Test Results), item validity was achieved by a consensus of experts. As stated earlier, the relational-ideopraxis construct consists of three distinct aspects (intrapersonal, suprapersonal and interpersonal) for which three panels were formed, one panel examining each aspect. The first panel assessed statements intended to measure relational behavior statements within
the intrapersonal aspect, consisting of three psychologists and a professional counselor, who classified each intrapersonal item on the questionnaire as acceptable, acceptable as modified, or unacceptable for item validity. Similarly, the statements related to the suprapersonal aspect, were evaluated by a panel of four accredited clergy members with formal training in spiritual direction and applied spirituality (non-Catholic denominations). Finally, since the contextual interest of the interpersonal aspects of spirituality were seen here as being associated with management theory, a team of six experienced managers with known robust spirituality levels (as established by clergy recommendations) were included as members of a third panel. The suprapersonal panel arrived at consensus after four iterations of discussions over a six-week period. The intrapersonal panel agreed only after two iterations of statement modifications. The interpersonal remained together for over two hours discussing clarity, intent and wording levels of the statements assigned. All 14 panelists agreed, after discussion and modifications, to the item validity of the statements within their expertise. These were the final statements used in composing the instrument and they are listed in Appendix I, the Test Specification Table.

After presenting the results of the item validity hypothesis (H04), the next hypotheses to be tested according to Table 8 are related to construct validity (H05-07).

Construct validity can be tested by three methods, namely, by testing internal validity (Cronbach's Alpha) using the robust spirituality control group (H05), by comparing means between a known robust and known fragile spirituality control group (H06), and by concurrency tests (H07) with two other scales (the Beazley© and Howden© spirituality scales).
Figure 2. Histogram of iSAS responses from the robust control group
In the first construct validity test (H₀₅), the iSAS is analyzed for internal validity of spirituality in a sample of subjects with known high spirituality levels (clergy and spouses), with five or more years of experience in management positions and with a college education (with at least associate degree). Defining a robust control group with these parameters, as stated earlier, is here assumed as a substitute (albeit limited) for the unavailability of a business organization with confirmed high spirituality levels in which the instrument could be more adequately tested. This definition of the robust control group resulted in a sample of 234 subjects (Figure 2) with a internal reliability of $\alpha_R = 0.89$ ($p = .05$), therefore rejecting this null hypothesis. This demonstrates that the iSAS maintains internal validity when measured with what was defined as a robust spirituality sample ($M = 153.6$, $SD = 24.6$).

The second construct validity test (H₀₆) requires a comparison of means between a known robust and a known fragile spirituality group, anticipating that there would be a statistically significant between mean scores. For the fragile control group, and as suggested by the literature on spirituality described earlier, the researcher sought subjects involved in formal 12 Step Programs (Green, Fullivove & Fullilove, 1998; Sandoz, 1999; White, Wampler & Fischer, 2001). Out of 82 potential subjects approached, the researcher was able to obtain 45 volunteers to take the iSAS. When comparing mean scores from this fragile control group ($n = 45$) with randomly selected subjects from the robust spirituality control group (50 out of 234) and using a t-test, the results show that there is a statistically significant difference ($p = .001$) when equal variances are assumed, and when equal variances are not assumed. Therefore, $H_0$ was rejected, and the iSAS
demonstrated validity in measuring differences of spirituality levels among these control groups.

The third test of validity involved concurrency with two other spirituality instruments (H07). In establishing threshold correlation with other instruments, the researcher anticipated correlation values between 0.30 and 0.60, suggesting some relationship between the iSAS and the other two instruments, yet still recognizing certain distinction between the constructs. In other words, a concurrency value below 0.30 would point to a weak relationship with spirituality, while a correlation above 0.60 would suggest too much overlap among instruments. When the construct validity of the iSAS was tested against the Beazley© and the Howden© instruments, the correlation results were \( r_B = 0.31 \) (\( n = 113 \), one outlier) and \( r_H = 0.53 \) (\( n = 220 \)) respectively. Thus, \( H_{07} \) was rejected, meaning that the iSAS demonstrated adequate correlation with two other spirituality scales. However, it must be noted that the sample size of the Beazley instrument (\( n = 113 \)) is below the established minimal of \( n = 200 \).

**Threats to Construct Validity**

The literature review identified denominational bias and ceiling effects as common problems with spirituality instruments (McMinn, 2001). To address denominational bias, the researcher obtained highly spiritual subjects of various Protestant denominations (\( n = 45 \)) who could be compared with a set of randomly selected Catholic subjects (\( n = 50 \)) from the robust control group (\( n = 234 \)). In performing a t-test between these to samples (\( H_{08} \)), there was no statistically significant difference noted (\( t = .110, p = 0.741 \)). In this case, the null hypothesis was accepted, namely, that
the iSAS did not recognize differences in spirituality levels among Catholics and Protestant subjects among these subjects.

The second threat noted as common to spirituality scales was a ceiling effect. To measure for any ceiling effect ($H_{09}$), a measure of skewness was used for the robust control group. As a statistic, skewness measures the degree of symmetry compared to a normal distribution (Hair, et.al., 1998). Using the robust control group, skewness was calculated at -0.29 ($n = 234$), thus accepting the null hypothesis that the iSAS does not demonstrate a ceiling effect in the robust control group.

As stated earlier, the "social desirability" of spirituality levels may be considered an additional threat to validity, but the methodologies employed in the research design (e.g., mail out responses instead of "in person", and emphasis on anonymity of responses) were believed to have aided in minimizing the effects of this threat.

**Additional Analyses**

Two additional analyses were conducted on the data collected to offer additional insight into the reliability and validity of the iSAS, namely, an instrument refinement technique using item correlations and an exploratory factor analysis.

The results of correlations between each item on the iSAS and the spirituality scores using the robust control group ($n = 234$) are presented in Table 9. In this table, the first column (Item) refers to the statement number on the iSAS. The second column contains the variable name as already presented in the Appendix I, the Test Specification Table. Since each variable has three items per relational mode, each variable name has a
suffix number (e.g., for the relational-mode describing Discovery of Self, each variable name is identified as DSELF1, DSELF2, DSELF3). To further illustrate this scheme, note that although TFIG is defined as the variable "transfigurational mode", item 1 in the iSAS is cross referenced as TFIG2, item 4 as TFIG1, and item 6 as TFIG3. Comparable references can be made with the remaining items and variables within the instrument.

The correlation values of each item with the spirituality scores vary from -0.160 (PART1) to 0.630 (ORGZ2). Notably, only two variables have a correlation value of over 0.60, namely, a statement on organizational mode (ORGZ2, r = 0.630) and an item on ideopraxis (IDPX1, r = 0.618). Specifically, the variable ORGZ2 relates to item 21 ("There is an organization's mission (at work or elsewhere) that is compatible with my spirituality") and demonstrates a strong relationship between a community's "mission orientation" and spirituality. The second highest correlation observed is between spirituality and "ideopraxis", as stated in item 20 ("I have been successful in aligning my day-to-day activities with my personal philosophy of life"). It is through the combination of both statements, the former on community intent (r = 0.630) and the later on ideopraxis (r = 0.618), that the researcher believes is the strongest evidence yet of spirituality as a relational-ideopraxis concept. Said differently, the combination of the two instrument statements corresponding to these items (IDPX1 is item 20 on the instrument, and ORGZ2 is item 21), then the combination of both statements as a spirituality measurement would read: "I have been successful in aligning my day-to-day activities with my personal philosophy of life (item 20) through an organization's mission that is compatible with my spirituality "(item 21). This phrase is strikingly similar to the
definition of relational ideopraxis here presented, namely, "a quest for a congruent ideology-lifestyle animated within a relational context".

In addition, by analyzing the correlation table it is possible to refine the iSAS and determine the effects of a refinement by recalculating internal reliability using the robust control group. If a rule is followed that items in Table 9 with correlation values $r \geq 0.40$ are retained (Nunnaly, 1978), then items 2, 5, 6, 11, 22, 24, 26, 28 and 39 are removed. With a refined iSAS of only 30 items, the value of Cronbach's Alpha using the same robust control group ($n = 234$) was then 0.91 ($M = 114.37$, $SD = 23.19$). Although it may be too premature at this point to refine the instrument without further analysis, it seems that the instrument possesses some redundancies that eventually need to be addressed.

As a second additional test, a factor analysis using principal components method and varimax rotation, was performed using the data from the robust control group ($n = 234$). The communalities for all variables were between 0.374 and 0.766, with 10 components extracted (achieving eigenvalues of 1.0 or more) explaining 61% of the total variance. Of the 10 components, 7 strongly aligned with relational modes proposed in this study (see Appendix M). In fact, one component is strongly representative of three organizational modes (partnership, small groups and organizational modes). Furthermore, "discovery of self" (component 2), and "self determination" (component 5) have two items each that strongly align. Finally, the transformational modes were so strong that they each aligned with a component: TFOR1 (component 7), TFOR2 (component 10) and TFOR3 (component 3). A factorial analysis was also performed this time using the first quartile ($M = 112.6$, $SD = 13.1$) of the total sample ($n = 508$), from which 14 components are extracted, but the results were not as easily interpretable.
In summary, the researcher has offered the findings for the present study in four sections, using the same order of testing methodologies presented in Chapter Three and Table 4, the Reliability and Validity Plan for the iSAS. First, a description of the process of obtaining the required sample to test the hypotheses was offered, followed by a discussion of the demographic characteristics of the sample. Next, the results of the statistical analyses are offered. The chapter ends with two additional analyses of the iSAS offering additional evidence of the validity of the relational-ideopraxis concept, namely an item correlation analysis and an exploratory factor analysis of the iSAS.

Upon completion of the findings, the next step of the research is to formulate and present conclusions and recommendations, which is the topic covered in Chapter Five.
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

The present chapter includes a summary of the study, a discussion of the findings, conclusions and implications for management theory and practice, and ends with some recommendations for further research.

The potential for spirituality theory in the management disciplines has generated a large volume of primarily theoretical literature, purporting many benefits for the workplace such as an increase in organization performance, insights into different leadership styles (transformational leadership). Yet at the threshold of this newly formed discipline initiated by popular interest stand the sentinels of field research methodologies in the forms of research questions, sampling of respondents, construction and validation of measures, data collection methods, and the objective presentation of research findings. It is in the gap between the excitement of a new field of management theory and the sparse availability of empirical studies that the present study is offered.

Specifically, the purpose of the present study was to extract from the literature review the theoretical foundations for a relational-ideopraxis framework (a construct of spirituality based upon a congruent ideology-lifestyle animated within a relational context inclusive of spiritual subjects), operationalize the framework into an instrument (through a test specification table and item validation by panels of experts), and then to test its validity and reliability. The present study posited that a reliable and valid spirituality
measurement scale founded on a relational-ideopraxis construct could be constructed to meet the empirical research needs of management theory development in spirituality by avoiding denominational (ideological) references, using a language more in-tune with management and organizational theory (rather than theological) concepts, and by building awareness of current management theory biases.

The relational-ideopraxis construct is defined as a way to integrate a worldview (ideology) inclusive of spiritual subjects into everyday activities (praxis) through an alternative human developmental process (adult learning theory) framed against relational interactions. The construct consists, to date, of a series of thirteen independent variables known as relational modes (a relational mode is a conforming arrangement of personal behaviors selected as a response to a contextual, relational demand). For each of these thirteen relational modes, three specific behaviors were operationalized into survey statements (see Appendix I), which were subject to item validation through three panels of experts. Once panelist consensus was achieved, an instrument was crafted by randomly ordering the resulting 39 statements, adding a seven point Likert scale to each statement, adding questions designed to collect demographics on the subjects, and attaching a cover sheet with instructions on what steps to follow during its administration.

The resulting instrument, called here the Independent Spirituality Assessment Scale (iSAS), demonstrated normality using the Kolmogorov-Smirnoff normality test \( p = 0.09, n = 234 \), homogeneity \( \alpha = 0.88, n = 508 \), and stability \( r = 0.92, n = 40 \). Construct validity for the iSAS was demonstrated through three methods. First by achieving a internal validity of 0.89 with a known, robust spirituality control group \( n = 235 \), followed by a t-test between scores of a robust \( n = 50 \) and a fragile \( n = 46 \).
spirituality control group. As expected, the iSAS scores were statistically significant between these two samples \(t(45) = 3.537, p = 0.001\). The third validation method was by concurrency with two other spirituality scales, namely Howden's © \(r_H = 0.53, n = 220\), and Beazley's © \(r_B = 0.31, n = 113\).

The iSAS demonstrated minimal influence from the two most prevalent biases purported by the literature, namely, denominational bias between Protestant and Catholic subjects and ceiling effect. There was no statistical significance \(p = 0.29\) when comparing samples of robust spirituality subjects from both denominations. Finally, ceiling effects were measured by degree of skewness, which for the iSAS is \(-0.29\), within the established threshold shown on Table 8 \((-0.50 \leq s \leq 0.50\).

Conclusions

Based on the favorable results of test of hypotheses \(H_{01}\) through \(H_{09}\), it can be concluded that spirituality can be measured as a relational-ideopraxis construct, independent of denominational or religious context. This conclusion was further supported by the analysis of item correlation with spirituality, and an exploratory factor analysis of the data collected. In correlating the 39 statements of the iSAS with the spirituality score \((n = 234)\), the two highest values were associated with a relational activity driven by a purpose \((\text{ORGZ2}, r = 0.630)\) and ideopraxis \((\text{IPDX1}, r = 0.618)\). As both independent variables were strong indicators of spirituality, then again, relational-ideopraxis as a construct was also considered here an indicator of spirituality.

Furthermore, a factor analysis using principal components and varimax rotation on the
same data (n = 234) yielded ten components that strongly aligned with seven of the relational modes of the construct (Appendix M). Furthermore, although the Alpha for the iSAS and the Howden© were the same (0.89), the iSAS achieved an \( \alpha = 0.91 \) after further refinements. Based on these findings, it can be suggested that relational-ideopraxis is a viable construct for measuring spirituality.

There were two innovative concepts in the present study that manifested relevant implications for management theory and practice. The fist new concept was "ideopraxis", or the combination of "ideo" (ideology) and "praxis" (application) to describe one of ten components extracted from 27 definitions of spirituality (Table 2). Ideopraxis in the present study was seen as a skill and effort to align a worldview into everyday activities with the expectation of a desired long-term transformation. Although not exclusive to spirituality, ideopraxis resulted in a moderately strong indicator of spirituality (\( r = 0.618 \)) when compared to overall spirituality scores. In an era characterized by organizational transformation with emphasis on change management, ideopraxis (the skill to align ideology into lifestyle) is a valuable management skill to possess, yet remains elusive (Pfeffer & Sutton, 2000).

The second innovative concept that offers relevant implications for management theory and practice comes from the discourse on the relational and contextual components essential to fostering a sense of community, a valuable insight for management practitioners. As stated in Chapter Two, the Literature Review, both the group mode and organizational mode represent key ingredients in building a sense of community within business organizations. On one hand, the small group mode represents behaviors that are nurtured through practical experiences in interpersonal relations,
whereas the organizational mode described behaviors that offered ideological contexts that govern and direct relational activities. Although the researcher is aware that the respondents may have not selected the work environment as the proscenium of their interpersonal responses to the iSAS, it is here suggested that the insight into group mode (e.g., team dynamics) and organizational mode (e.g., mission, vision, culture, values) as they relate to spirituality, can result in a "competitive edge" for both the individual and the organization (Waddock, 1999; Waddock, 2002).

With these findings, researchers within the business disciplines may have another spirituality scale that functions independent of ideology or belief systems, thereby minimizing discriminatory risks and resentments emerging from decisions skewed towards religious preferences. In offering this finding, the present study also confirms the validity of spirituality as a separate construct from religion (Bristow-Braitman, 1995; Mattis, 2000; Zinbauer, et.al., 1997).

These findings offer another topography (primarily relational in nature) to find a more agreeable definition of spirituality across multiple professional disciplines, and raise the awareness of biases needing resolution within management theory. Although designed first for Management, the relational-ideopraxis construct may appeal to other sciences currently engaged in relational investigations of spirituality research (e.g., leadership, psychology, counseling, medicine, sociology, theology). It may also be concluded that, if management discourse has underestimated relational theory (Fletcher, 1998) and business practice continues with a poor record of effective interpersonal relations at work (Meister, 2001), then the validity of this relationally founded construct of spirituality may serve as a reason to appraise and rectify these biases.
With these conclusions, the purpose of the present study, which was to extract from the literature review the theoretical foundations for a relational-ideopraxis framework (a construct of spirituality based upon a congruent ideology-lifestyle animated within a relational context inclusive of spiritual subjects), operationalize the framework into an instrument (through a test specification table and item validation by panels of experts), and then to test its validity and reliability, has been satisfied. The present study has demonstrated that a reliable and valid spirituality measurement scale founded on a relational-ideopraxis construct can be constructed to meet the empirical research needs of management theory development in spirituality by avoiding denominational (ideological) references, using a language more in-tune with management and organizational theory (rather than theological) concepts, and building awareness of current management theory biases.

So far in this chapter, a discussion of the findings, conclusions, and implications for management theory and practice have been presented. Only remaining to be addressed are the possibilities of future research.

Recommendations

The true challenge in offering recommendations for further research on a management discipline considered still in its infancy, is to highlight research priorities rather than offer a list of opportunities available. Virtually infinite opportunities become available by just reviewing the abundance of theoretical literature on spirituality or by re-considering the effects of spirituality on proven management concepts. However, this researcher intuits that too much energy in theoretical discourse and unfocused empirical
effort would increase the risk of perpetuating a condition within the discipline where there is already more breadth than depth of subject (Sass, 1999).

It therefore should come as no surprise that this researcher chooses to place focused empirical investigation as a high priority for this new discipline of spirituality in management. A continued flow of carefully crafted empirical research projects is imperative if the gap between the abundance of theoretical publications and the sparse existence of rigorous, empirical studies is to be bridged. Otherwise, this researcher believes that the potential of spirituality in management theory can slowly drift into superficial faddishness, rather than assert itself as a valuable discipline.

Having prefaced this section with a summary of the researcher's perspective on setting priorities for research recommendations, there are a series of themes arising from the present study that merit additional investigative attention. Specifically, eight recommendations are offered:

1. An analysis of the theoretical and methodological limitations of the present study offers the first line of research opportunities. Some of these include the selection of only thirteen spirituality relational modes (recognizing that there may exist other optimal possibilities), the preference for (but unavailability of) a proven spirituality business organizational setting as an ideal test site for operationalizing and testing spirituality outcomes, sampling constraints, and the errors associated with self-reporting. Finally, environmental conditions may have also introduced biases into the study that are, in the researchers opinion, hard to assess. Some authors identify a change in national spiritual "mood" after the tragic events of
September 2001 (Briggs, 2001; Wickens, Macqueen & McClelland, 2001), events that occurred during the same period as when the instruments were being administered. Many of these limitations are related to time and resources, which hopefully can be overcome with more comprehensive research projects.

2. The interpretation of the item stem "...at work or elsewhere..." used in many of the interpersonal statements in the iSAS instrument may be subject to ambiguity since it may reflect more the religious organization each subject belongs to rather than a degree of association with the organization where the subject works. This distinction may not be definitive, but the researcher believes that the measurements associated with relational practices from the interpersonal mode (partnerships, small groups, organizations and movements) may be relevant in understanding the effects of spirituality at work, particularly when formulating policies and programs to harvest its benefits. Empirical assessments of the interaction between spirituality, its effects on organizational practices, and the effect of business practices on spirituality resulting in a competitive edge, become a research priority.

3. Other research opportunities include replicating the Independent Spirituality Assessment Scale (iSAS) with a more diverse population (denominational, cultural, gender), analyzing its predictive abilities, and using it to correlate spirituality with other scales and concepts in management (see Appendix L for a literature mapping of relational modes with specific management concepts).
4. The exploratory factor analysis performed in the present study resulting in the validity of ten extracted components that directly relate to seven relational modes of the Independent Spirituality Assessment Scale (iSAS) was considered here a preliminary effort. A more in-depth assessment of these results as well as a confirmatory factor analysis of the present study, seem to be warranted.

5. While conducting a review of the literature, this researcher discovered very few empirical studies comparing spirituality constructs. To illustrate, the present study of the iSAS correlated with the Howden (r = 0.53, n = 220) and Beazley (r = 0.31, n = 113) instruments. This researcher was unable to find a comparative analysis of these instruments that might offer insight into why one correlated higher with the iSAS than the other. The analysis of commonalities and differences among spirituality constructs and scales needs further attention.

6. A most challenging research question that comes to the forefront in researching spirituality and management theory is the issue of human-divine codetermination in business organizations. In pondering about spirituality in business organizations, Vaill (1998) reflects on the challenges of this issue: "Can there be a divinely grounded organizational behavior-- that is, a serious study in which organizational events are assumed to be codetermined by human and divine action?" (Vaill, 1998, p.172). The study of this human-divine codetermination in a setting typified by group and organization relational modes has been conducted
and validated for religious organizations by Wuthnow (1994), but the degree of its application to the business domain remains primarily theoretical (pending empirical validation). Comparable studies that posit human-divine codetermination in a setting typified by group and organization relational modes, conducted and validated for business organizations, is imperative.

7. Despite the immediate value of “ideopraxis” (the skill to maintain a congruent worldview-lifestyle complex) to the present study, a more comprehensive empirical assessment of its value to spirituality as well as other areas of management theory is of essence. For instance, as a management skill, ideopraxis may prove to be an important variable in estimating the ability of a manager or an organization to fulfill a corporate vision (ideology), implement strategy, or adapt to an evolving corporate culture. Needless to say, “ideopraxis” as a concept, is a subject for management (as well as for other disciplines) which needs further clarification.

8. Last, but not least, is the relevance of conducting further research on the validity and value of relational theory in management. As stated earlier, both spirituality and relational theory tend to have been under-theorized in management discourse. Since this study posits that spirituality is fundamentally relational, it seems only natural that both of these fields of study be examined further.

As was mentioned, this researcher finds that the true challenge in offering recommendations for further research is providing guidelines more in line with
investigative priorities than on the opportunities available. Given that there seems to be a significant gap between theoretical and empirical studies in this management discipline, it should not come as a surprise that this researcher offered eight recommendations for further empirical investigation.

The present study demonstrated sufficient evidence that spirituality can be construed within a management theory context and measured as a distinct concept independent of ideological or denominational connotations. As a result of conceiving a relational-ideopraxis framework, the construct here tested was able to employ modes of relationships already familiar to management discourse (intrapersonal and interpersonal) to measure spirituality. At the same time the framework was able to highlight topics for which theoretical development may be lacking (e.g., the effect of suprapersonal relationships in organizational management, and the effects of movements in changing organizations). With this framework and instrument, the present study is believed to be a contributor in closing the gap between an abundance of theoretical contributions and the scarcity of empirical studies and in reaching a more agreeable definition of spirituality acceptable to other disciplines (e.g., psychology, sociology, medicine, theology). In summary, it is thought that the demonstration of spirituality as a relational-ideopraxis construct here tested may accentuate its relevance to management theory development, and stimulate further research, while remaining palatable to the objections and biases of management theoreticians and practitioners.

The instrument here presented represents an intense effort to offer Human Resources personnel, professional organizational developers, management consultants and researchers with a spirituality construct and measurement tool congenial to the
business environment. With this measurement tool, Human Resource Managers have a way to assess spirituality as a recruiting and retention factor, as a stress and a substance abuse preventive measure, and spirituality as a "quality of life at work" factor, where the need for a "Corporate Chaplain" may be justified. Professionals and consultants dedicated to organizational development may find this instrument useful in assessing spirituality as a factor of organizational wellness, a method to transform the workplace into a true sense of community, a tool to discern a corporate "spiritual" identity, or as the next topic in the evolution of corporate culture. Finally, researchers may be interested in using this instrument to discover the relationship of spirituality with other variables, such as resilience, tolerance to ambiguity, organizational loyalty, healing and recovery, to mention a few. In other words, now that a "relational anatomy of spirituality" is available, professionals are encouraged to use this instrument and to continue the discovery of spirituality as a contributing factor in management theory.

As a final note to this chapter and to the present study, the researcher is encouraged by what has been and is being accomplished within the discipline of spirituality and management. It remains the researcher's hope that the present study on spirituality as a relational-ideopraxis construct, helps crystallize the drive to foster a spirituality movement and assist the disciplines of management to shift more towards a relationally dominant paradigm.
List of References


APPENDIX A

Appendix A: Informed Consent Letter
Statement of Informed Consent to Participate in Research

Dear Research Participant:

Thank you for taking interest in participating in this research project. Your participation is anonymous, so please do not give your name or right your name on the questionnaire. However, you may want to copy down strictly for your own information, the control number so you can view your results.

As a participant, you will be asked to respond in writing to a series of statements using a scale raging from Disagree to Agree to the extreme, which you may directly mark on the worksheets. The statements as a whole are designed to measure different aspects of your life and in no way attempt to change, challenge or offend any of your personal beliefs.

Your participation will take approximately 12 minutes.

Your participation in this research is strictly voluntary. You may refuse to participate at all, or choose to stop participation at any point in the research, without fear of penalty or negative consequences of any kind.

The information you provide for this research will be treated confidentially, and all the raw data from the questionnaires will be kept in a secure file by the researcher. Results of the research will be reported as aggregate summary data only, and no identifiable information will be presented.

A control number is added to the questionnaire to establish an accountability of all the questionnaires prepared and submitted. After a few weeks, you may view your results by visiting the web site http://www.primileadership.com, a site owned and controlled by the researcher. Again, and for your own purposes, please make sure you maintain confidential the control number of the questionnaire form you are using.

RONALD R. ROJAS
Doctoral Candidate
Argosy University
APPENDIX B

Appendix B: The Independent Spirituality Assessment Scale (iSAS)©
SPirituality assessment research project

This research project consists of three different types of assessments (Parts I, II and III of this packet). It is designed to measure spirituality regardless of religious preference or denominational affiliation. This assessment should be administered on a voluntary basis.

To protect the confidentiality of your personal results, please do not write your name on this form. However, if you want to know your own scores, make note of the serial number at the top and within a few weeks visit http://www.prismleadership.com to view the scores. Remember to keep your control number confidential.

Examine each of the following statements carefully and indicate your honest opinion by using one of the alternatives offered. Please make sure that you respond to all of the statements contained in this package.

Indicate your gender:  □ Female  □ Male

Indicate your age group:
□ Less than 21
□ 21 - 30
□ 31 - 40
□ 41 - 50
□ 51 - 60
□ 61 or over

Indicate your highest education level:
□ High School Diploma  □ Associate Degree
□ Undergraduate Degree  □ Graduate Degree
□ Vocational Degree  □ None of the Above

Indicate which cultural heritage has the most influence on your personal and social development:
□ Caucasian American  □ Indonesian American  □ African American
□ European  □ Hispanic  □ Indian
□ Native American  □ Nordic  □ Asian
□ Far East  Other (specify) ________________________________

Indicate the total number of years of experience you have in management positions:____ ____
Part 1. Indicate your answer (0 - 6) in the space provided at the beginning of each line.

<table>
<thead>
<tr>
<th>0=DISAGREE</th>
<th>1=MARGINALLY</th>
<th>2=PARTIALLY</th>
<th>3=AGREE</th>
<th>4=VERY MUCH</th>
<th>5=STRONGLY</th>
<th>6=AGREE TO THE EXTREME</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE</td>
<td>AGREE</td>
<td>AGREE</td>
<td>AGREE</td>
<td>AGREE</td>
<td>AGREE</td>
<td></td>
</tr>
</tbody>
</table>

1. _____ Everything I am in my private life, I am also in public life.

2. _____ I consider learning a high priority in my life.

3. _____ I am a member of a group (at work or elsewhere) that truly cares about all aspects of my life.

4. _____ I have overcome all of my fears.

5. _____ My spirituality depends on my feelings.

6. _____ I can tolerate an environment with a variety of ideologies, even if they are at odds with my own.

7. _____ I spend some time each day reflecting on my daily activities as a way to adjust my behaviors.

8. _____ My convictions have only become stronger over time.

9. _____ I am determined in my convictions.

10. _____ I can easily cope with adverse situations beyond my personal control.

11. _____ I am not pursuing any deliberate, long-term transformations of my life.
12. _____ My ideals in life are represented by one or more social, political or religious movement.

13. _____ I am unyielding when it comes to making moral decisions.

14. _____ I am living according to my personal calling in life.

15. _____ There is an organization's vision (at work or elsewhere) that is in harmony with my personal vision of life.

16. _____ There is an organizational culture (at work or elsewhere) that stimulates me spiritually.

17._____ I am continuously trying to discover more about myself.

18._____ I am consciously growing towards the full use of my abilities.

19._____ I am a member of a group (at work or elsewhere) that provide me with a happiness and joy.

20._____ I have been successful in aligning my day-to-day activities with my personal philosophy of life.

21._____ There is an organization's mission (at work or elsewhere) that is compatible with my spirituality.

22._____ I am very unsatisfied with my development as a unique individual.

23._____ I have a mentor (at work or elsewhere) that helps me resolve my life issues.
24. ______ I am comfortable not completely resolving moral ambiguities in
the choices I make.

25. ______ Finding more about "Who I am" is a high priority in my life.

26. ______ My spirituality depends on my faith.

27. ______ I spend time reflecting on ways to become a better person.

28. ______ There is nobody guiding me spiritually.

29. ______ I am very purposeful in my actions.

30. ______ I consider myself a change agent for things that are wrong in
our society.

31. ______ I have been influenced by the ideals of a social, political or
religious movement.

32. ______ I have a strong, healthy will.

33. ______ There is "someone" special to me (at work or elsewhere) that I
depend on to provide me with spiritual motivation.

34. ______ I conduct deliberate activities to form my personality.

35. ______ I am always loyal to all of my convictions.

36. ______ My talents are being applied to their maximum extent.
37. ______ I adapt well even in the face of severe adversity.

38. ______ I am a member of a group (at work or elsewhere) that lives a true sense of community.

39. ______ I cannot grow when dealing with life events out of my control.

(Note: Part 2 of the instrument is a copy of either the Beazley© or Howden© spirituality scales.)
APPENDIX C

Appendix C: Research, Human Subjects Approval Form
APPENDIX D

APPENDIX D: Beazley's Permission, SAS©
APPENDIX E

Appendix E: Howden's Permission, SAS©
APPENDIX F

Appendix F: Summary of suprapersonal models
Appendix F

Summary of suprapersonal models used to substantiate suprapersonal relational modes.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactional Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Evolving characteristics</td>
<td>Dogmatic believers</td>
</tr>
<tr>
<td>Fluid convictions</td>
<td>High spiritual support scores</td>
</tr>
<tr>
<td>Theological dogmatism</td>
<td>Low spiritual openness scores</td>
</tr>
<tr>
<td>Juxtaposed motives/attitudes</td>
<td>Certitude for own spiritual formulations</td>
</tr>
<tr>
<td>Feeling-orientation</td>
<td></td>
</tr>
<tr>
<td>Conditional love</td>
<td></td>
</tr>
<tr>
<td>Black/white morals</td>
<td></td>
</tr>
<tr>
<td>Less biblical knowledge</td>
<td></td>
</tr>
<tr>
<td>Egocentric reasoning</td>
<td></td>
</tr>
<tr>
<td><strong>Transformational Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Evolving characteristics</td>
<td>Transitional</td>
</tr>
<tr>
<td>Solid convictions</td>
<td>Low spiritual support scores</td>
</tr>
<tr>
<td>Less theological dogmatism</td>
<td>High spiritual openness scores</td>
</tr>
<tr>
<td>Purer motives/attitudes</td>
<td>Re-examining beliefs and ideals</td>
</tr>
<tr>
<td>Faith-orientation</td>
<td></td>
</tr>
<tr>
<td>Less conditional love</td>
<td></td>
</tr>
<tr>
<td>Black/white/gray morals</td>
<td></td>
</tr>
<tr>
<td>Greater biblical knowledge</td>
<td></td>
</tr>
<tr>
<td>Others-centered reasoning</td>
<td></td>
</tr>
<tr>
<td><strong>Transfigurational Mode</strong></td>
<td></td>
</tr>
<tr>
<td>Deep consistent relationship with God</td>
<td>Growth-oriented</td>
</tr>
<tr>
<td>Secure theology fosters flexibility</td>
<td>High spiritual support score</td>
</tr>
<tr>
<td>No duplicity between public and private self</td>
<td>High spiritual openness score</td>
</tr>
<tr>
<td>Unwavering faith even in unexplainable tragedy</td>
<td>Firm convictions coexist</td>
</tr>
<tr>
<td>Compassionate/redemptive with others failings</td>
<td>High tolerance for variety of beliefs</td>
</tr>
<tr>
<td>Universal moral framework</td>
<td></td>
</tr>
<tr>
<td>Through biblical knowledge</td>
<td></td>
</tr>
<tr>
<td>Self transcendence for the sake of others</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G

Appendix G: Literature volume search
Appendix G

**Literature volume search correlating predominance of relational activity at group level and predominance of contextual activities at organizational level**

<table>
<thead>
<tr>
<th>Keywords used in literature volume searches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational Activity</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Interpersonal</td>
</tr>
<tr>
<td>Volume of Articles</td>
</tr>
<tr>
<td>Organization</td>
</tr>
<tr>
<td>Small Group</td>
</tr>
<tr>
<td>Team</td>
</tr>
</tbody>
</table>

Note: EBSCO volume search conducted by the author on 8 January 2001.
APPENDIX H

Appendix H: Institutional Consent Forms
APPENDIX I

Appendix I: Test Specification Table
<table>
<thead>
<tr>
<th>Relational Modes (Variable Name)</th>
<th>Intended Behaviors Measurement</th>
<th>Item</th>
<th>Selected Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfillment of Self (FSELF)</td>
<td>Measure the degree of perceived fulfillment in the subject's life. (<em>potential, capabilities, talent</em>)</td>
<td>18</td>
<td>I am consciously growing towards the full use of my abilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36</td>
<td>My talents are being applied to their maximum extent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>I am very unsatisfied with my development as a unique individual.</td>
</tr>
<tr>
<td>Self Determination (SDTR)</td>
<td>Measure the degree of perceived strength of will. (<em>convictions, will, purposefulness</em>)</td>
<td>9</td>
<td>I am determined in my convictions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32</td>
<td>I have a strong, healthy will.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29</td>
<td>I am very purposeful in my actions.</td>
</tr>
<tr>
<td>Self Control (SCON)</td>
<td>Measure the ability of the subject to cope with events beyond his or her control.</td>
<td>10</td>
<td>I can easily cope with adverse situations beyond my personal control.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>I adapt well even in the face of severe adversity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39</td>
<td>I cannot grow when dealing with life events out of my control.</td>
</tr>
<tr>
<td>Discovery of Self (DSELF)</td>
<td>Determine the subject's level of effort in discovering self</td>
<td>17</td>
<td>I am continuously trying to discover more about myself.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>I am living according to my personal calling in life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>Finding more about &quot;Who I am&quot; is a high priority in my life.</td>
</tr>
<tr>
<td>Enrichment of Self (ESELF)</td>
<td>Measure the subject's efforts in conducting activities oriented towards enrichment of self (<em>learning, self improvement, reflective</em>)</td>
<td>34</td>
<td>I conduct deliberate activities to form my personality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>I spend time reflecting on ways to become a better person.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>I consider learning a high priority in my life.</td>
</tr>
<tr>
<td>Partnership mode (PART)</td>
<td>Measure the degree to which a partnership type relationship improves the overall Self (<em>friendship, mentoring, work partnership</em>)</td>
<td>28</td>
<td>There is nobody guiding me spiritually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
<td>There is &quot;someone&quot; special to me (at work or elsewhere) that I depend on to provide me with spiritual motivation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>I have a mentor (at work or elsewhere) that helps me resolve my life issues.</td>
</tr>
<tr>
<td>Small group mode (SGP)</td>
<td>Measure the degree to which a small group relationships improves the overall Self (<em>community where life, growth and happiness are supporting behaviors</em>)</td>
<td>3</td>
<td>I am a member of a group (at work or elsewhere) that truly cares about all aspects of my life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38</td>
<td>I am a member of a group (at work or elsewhere) that lives a true sense of community.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19</td>
<td>I am a member of a group (at work or elsewhere) that provides me with happiness and joy.</td>
</tr>
<tr>
<td>Relational Modes (Variable Name)</td>
<td>Intended Behaviors Measurement</td>
<td>R</td>
<td>Selected Statements</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------</td>
<td>---</td>
<td>---------------------</td>
</tr>
<tr>
<td>Organizational Mode (ORGZ)</td>
<td>Measure the degree to which a organizational relationship improves the overall Self (culture, mission, vision)</td>
<td>16</td>
<td>There is an organizational culture (at work or elsewhere) that stimulates me spiritually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td>There is an organization's mission (at work or elsewhere) that is compatible with my spirituality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>There is an organization's vision (at work or elsewhere) that is in harmony with my personal vision of life.</td>
</tr>
<tr>
<td>Movement mode (MOVVT)</td>
<td>Measure the degree to which a movement relationships improves the overall Self (awareness, participation, conversion)</td>
<td>30</td>
<td>I consider myself a change agent for things that are wrong in our society.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31</td>
<td>I have been influenced by the ideals of a social, political or religious movement.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>My ideals in life are represented by one or more social, political or religious movements.</td>
</tr>
<tr>
<td>Ideopraxis (IDPX)</td>
<td>Measure the subject's level of ideopraxis. (congruence of ideology &amp; lifestyle, operational ideopraxis, strategic ideopraxis)</td>
<td>20</td>
<td>I have been successful in aligning my day-to-day activities with my personal philosophy of life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>I spend some time each day reflecting on my daily activities as a way to adjust my behaviors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>I am not pursuing any deliberate, long-term transformations of my life.</td>
</tr>
<tr>
<td>transactional mode (TRACT)</td>
<td>Determine if the relationship with a spiritual presence is primarily transactional.</td>
<td>5</td>
<td>My spirituality depends on my feelings.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>I am unyielding when it comes to making moral decisions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>I am always loyal to all of my convictions.</td>
</tr>
<tr>
<td>transformational mode (TFOR)</td>
<td>Determine if the relationship with a spiritual presence is primarily transformational.</td>
<td>24</td>
<td>I am comfortable not completely resolving moral ambiguities in the choices I make.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>My spirituality depends on my faith.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>My convictions have only become stronger over time.</td>
</tr>
<tr>
<td>transfigurational mode (TFIG)</td>
<td>Determine if the relationship with a spiritual presence is primarily transfigurational. (childlike attitude, fears, private &amp; public spheres of life)</td>
<td>4</td>
<td>I have overcome all of my fears.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Everything I am in my private life, I am also in public life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>I can tolerate an environment with a variety of ideologies, even if the are at odds with my own.</td>
</tr>
</tbody>
</table>
APPENDIX J

APPENDIX J: ProQuest Database Ten Year Search
Appendix J

Results of ProQuest® Yearly Search with Keywords "Spirituality and Management"

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>6</td>
</tr>
<tr>
<td>1991</td>
<td>5</td>
</tr>
<tr>
<td>1992</td>
<td>8</td>
</tr>
<tr>
<td>1993</td>
<td>10</td>
</tr>
<tr>
<td>1994</td>
<td>13</td>
</tr>
<tr>
<td>1995</td>
<td>21</td>
</tr>
<tr>
<td>1996</td>
<td>32</td>
</tr>
<tr>
<td>1997</td>
<td>26</td>
</tr>
<tr>
<td>1998</td>
<td>62</td>
</tr>
<tr>
<td>1999</td>
<td>44</td>
</tr>
<tr>
<td>2000</td>
<td>60</td>
</tr>
</tbody>
</table>

Note. This search was conducted on 29 October 2001.
APPENDIX K

APPENDIX K: Spirituality Instruments, Properties and Attributes
Appendix K
Selected Spirituality Instruments, Properties and Attributes Measured

<table>
<thead>
<tr>
<th>Instrument Name</th>
<th>Source</th>
<th>Properties</th>
<th>Attributes Measured</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown-Peterson Recovery Index</td>
<td>Brown &amp; Peterson, 1991</td>
<td>Split Reliability = 0.94; α and test/retest data not reported</td>
<td>Assessing spirituality in members of Alcoholics Anonymous (client behavior)</td>
<td>53</td>
</tr>
<tr>
<td>Faith Maturity Scale</td>
<td>Benson, Donahue &amp; Erickson, 1993</td>
<td>Horizontal Scale showed and α = 0.97; Vertical Scale α = 0.81</td>
<td>Fulfilling faith orientation</td>
<td>12</td>
</tr>
<tr>
<td>God as Causal Agent Scale</td>
<td>Ritzema &amp; Young, 1983</td>
<td>α = 0.74</td>
<td>Primary causal agent for naturally occurring events</td>
<td>14</td>
</tr>
<tr>
<td>Human Spirituality Scale (HSS)</td>
<td>Wheat, 1991</td>
<td>α = .89, Panel of experts, item discrimination ≥ 0.30 n =152</td>
<td>Content Dimensions: larger that life context, awareness of life with self and others, and reverent compassion for others</td>
<td>20</td>
</tr>
<tr>
<td>Index of Core Spiritual Experiences (INSPIRIT)</td>
<td>Kass, Friedman, Leserman, Zuttermeister &amp; Benson, 1991</td>
<td>α = 0.90 Concurrency with Religious Orientation Inventory = 0.69</td>
<td>God exists &amp; God dwells in the individual</td>
<td>7</td>
</tr>
<tr>
<td>Purpose in Life Scale (PIL)</td>
<td>Crumbaugh &amp; Maholick, 1981</td>
<td>Split half = 0.92. test-retest = 0.83</td>
<td>Meaning in Life</td>
<td>20</td>
</tr>
<tr>
<td>Quest Scale</td>
<td>Baston &amp; Schoenrade (1991)</td>
<td>α's between 0.75 and 0.81</td>
<td>Measures of religious orientation</td>
<td>12</td>
</tr>
<tr>
<td>Religious Life Inventory (RLI)</td>
<td>Batson, 1976</td>
<td>α's are internal = 0.89, external = 0.80, and quest = 0.42</td>
<td>Religious Motivations (internal, external and quest)</td>
<td></td>
</tr>
<tr>
<td>Self-Actualization Scale</td>
<td>Jones &amp; Crandall, 1986</td>
<td>α = 0.54</td>
<td>Maslow's highest level of development</td>
<td>15</td>
</tr>
<tr>
<td>Name</td>
<td>Instrument Name</td>
<td>Source</td>
<td>Properties</td>
<td>Attributes Measured</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Spiritual Assessment Inventory (SAI)</td>
<td>Hall &amp; Edwards, 1996</td>
<td>All scales show $\alpha$ between 0.52 and 0.93</td>
<td>Measure of spiritual maturity, religious orientation</td>
<td>43</td>
</tr>
<tr>
<td>Spirituality Assessment Scale (SAS)</td>
<td>Beazley, 1997</td>
<td>$\alpha = 0.88$; Thurstone Judges</td>
<td>All items $\alpha = 0.92$ Test/retest not reported</td>
<td>Unifying Connectedness, Purpose and Meaning in Life, Innerness and Transcendence (non-religious orientation)</td>
</tr>
<tr>
<td>Spirituality Assessment Scale (SAS)</td>
<td>Howden, 1992</td>
<td>$\alpha = 0.92$</td>
<td>Test/retest not reported</td>
<td>Well being from biological, psychological, social and spiritual dimensions</td>
</tr>
<tr>
<td>Spiritual Health Inventory (SHI)</td>
<td>Veach &amp; Chappel, 1992</td>
<td>$\alpha$ moderate, but not reported; $n = 148$</td>
<td>Well being from biological, psychological, social and spiritual dimensions</td>
<td>18</td>
</tr>
<tr>
<td>Spirituality Scale (SS)</td>
<td>Jagers &amp; Smith, 1996</td>
<td>Reported $\alpha$'s of 0.84 &amp; 0.87 Test/retest = 0.88 $n = 68$ Afro, $n = 75$ Euro</td>
<td>Afrocultural perspective of spirituality as worldview</td>
<td>20</td>
</tr>
<tr>
<td>Spiritual Transcendence Scale (STS)</td>
<td>Piedmont, 1999</td>
<td>Universality ($\alpha = 0.83$, Prayer Fulfillment $\alpha = 0.87$, Connectedness $\alpha = 0.64$)</td>
<td>Universality, Prayer Fulfillment, Connectedness</td>
<td>24</td>
</tr>
<tr>
<td>Spiritual Well-being Scale (SWBS)</td>
<td>Ellison, 1983</td>
<td>$\alpha$'s for SWB = 0.89, RWB = 0.96, EWB = 0.78 Test/retest: SWB = 0.93, RWB = 0.96 and EWB = 0.86</td>
<td>Spiritual Well being (SWB)Religious well being (RWB) and Existential well-being (EBW)</td>
<td>20</td>
</tr>
</tbody>
</table>
APPENDIX L

Appendix L: Map of relational modes to management theory and research topics
APPENDIX M

Appendix M: Results of Exploratory Factor Analysis (varimax rotation) for the iSAS
### Components Extracted

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFIG2</td>
<td>0.214</td>
<td>0.127</td>
<td>0.287</td>
<td>0.377</td>
<td>-0.216</td>
<td>0.106</td>
<td>0.280</td>
<td>-0.026</td>
<td>0.148</td>
<td>-0.234</td>
</tr>
<tr>
<td>ESELF3</td>
<td>0.007</td>
<td>0.320</td>
<td>0.078</td>
<td>-0.020</td>
<td>0.442</td>
<td>-0.084</td>
<td>0.386</td>
<td>-0.169</td>
<td>0.250</td>
<td>0.044</td>
</tr>
<tr>
<td>SGP1</td>
<td>0.562</td>
<td>0.297</td>
<td>0.096</td>
<td>0.246</td>
<td>-0.272</td>
<td>-0.001</td>
<td>0.158</td>
<td>-0.206</td>
<td>0.127</td>
<td>-0.182</td>
</tr>
<tr>
<td>TFIG1</td>
<td>0.000</td>
<td>0.002</td>
<td>0.475</td>
<td>0.477</td>
<td>0.063</td>
<td>-0.049</td>
<td>0.345</td>
<td>0.053</td>
<td>0.153</td>
<td>0.039</td>
</tr>
<tr>
<td>TACT1</td>
<td>-0.014</td>
<td>0.116</td>
<td>0.019</td>
<td>0.102</td>
<td>0.104</td>
<td>0.680</td>
<td>-0.160</td>
<td>-0.157</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFIG3</td>
<td>0.107</td>
<td>0.083</td>
<td>-0.003</td>
<td>-0.038</td>
<td>0.112</td>
<td>0.151</td>
<td>0.190</td>
<td>0.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDPX2</td>
<td>0.043</td>
<td>0.576</td>
<td>0.331</td>
<td>0.172</td>
<td>-0.057</td>
<td>-0.184</td>
<td>0.087</td>
<td>0.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFOR3</td>
<td>0.156</td>
<td>0.149</td>
<td>0.756</td>
<td>0.082</td>
<td>0.122</td>
<td>-0.014</td>
<td>0.043</td>
<td>-0.121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDTR1</td>
<td>0.323</td>
<td>0.173</td>
<td>0.686</td>
<td>0.042</td>
<td>0.238</td>
<td>0.036</td>
<td>-0.095</td>
<td>-0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCON1</td>
<td>0.133</td>
<td>0.210</td>
<td>0.490</td>
<td>0.287</td>
<td>-0.182</td>
<td>-0.104</td>
<td>0.008</td>
<td>0.430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDPX3</td>
<td>-0.032</td>
<td>-0.328</td>
<td>0.015</td>
<td>0.085</td>
<td>-0.131</td>
<td>0.474</td>
<td>0.045</td>
<td>0.071</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOVT3</td>
<td>0.350</td>
<td>0.090</td>
<td>0.286</td>
<td>0.000</td>
<td>-0.243</td>
<td>0.224</td>
<td>0.392</td>
<td>-0.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TACT2</td>
<td>0.307</td>
<td>0.003</td>
<td>0.541</td>
<td>0.103</td>
<td>-0.167</td>
<td>0.195</td>
<td>0.155</td>
<td>0.047</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSELF2</td>
<td>0.174</td>
<td>0.096</td>
<td>0.526</td>
<td>0.296</td>
<td>0.125</td>
<td>0.117</td>
<td>-0.015</td>
<td>0.079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGZ3</td>
<td>0.725</td>
<td>0.077</td>
<td>0.269</td>
<td>0.002</td>
<td>0.102</td>
<td>0.025</td>
<td>-0.074</td>
<td>0.185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGZ1</td>
<td>0.777</td>
<td>0.130</td>
<td>0.227</td>
<td>-0.025</td>
<td>0.021</td>
<td>0.043</td>
<td>-0.064</td>
<td>0.154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSELF1</td>
<td>0.205</td>
<td>0.813</td>
<td>0.097</td>
<td>-0.025</td>
<td>0.089</td>
<td>0.096</td>
<td>0.048</td>
<td>0.050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSELF1</td>
<td>0.131</td>
<td>0.710</td>
<td>0.086</td>
<td>0.120</td>
<td>0.262</td>
<td>-0.017</td>
<td>0.031</td>
<td>0.056</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGP3</td>
<td>0.697</td>
<td>0.200</td>
<td>0.049</td>
<td>0.184</td>
<td>0.046</td>
<td>0.007</td>
<td>0.060</td>
<td>-0.167</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDPX1</td>
<td>0.275</td>
<td>0.197</td>
<td>0.255</td>
<td>0.402</td>
<td>0.290</td>
<td>-0.029</td>
<td>0.270</td>
<td>0.119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORGZ2</td>
<td>0.750</td>
<td>0.025</td>
<td>0.182</td>
<td>0.149</td>
<td>0.211</td>
<td>-0.074</td>
<td>0.022</td>
<td>0.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSELF3</td>
<td>0.068</td>
<td>0.076</td>
<td>-0.037</td>
<td>0.011</td>
<td>0.086</td>
<td>0.021</td>
<td>0.145</td>
<td>0.788</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PART3</td>
<td>0.517</td>
<td>0.057</td>
<td>0.013</td>
<td>0.109</td>
<td>0.199</td>
<td>-0.219</td>
<td>0.218</td>
<td>-0.072</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFOR1</td>
<td>-0.021</td>
<td>0.032</td>
<td>-0.147</td>
<td>0.042</td>
<td>0.023</td>
<td>0.164</td>
<td>0.744</td>
<td>0.176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSELF3</td>
<td>0.059</td>
<td>0.793</td>
<td>-0.007</td>
<td>0.059</td>
<td>0.065</td>
<td>0.117</td>
<td>0.088</td>
<td>0.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFOR2</td>
<td>0.059</td>
<td>0.128</td>
<td>0.141</td>
<td>0.046</td>
<td>0.000</td>
<td>0.013</td>
<td>-0.013</td>
<td>0.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESELF2</td>
<td>0.164</td>
<td>0.743</td>
<td>0.103</td>
<td>0.071</td>
<td>0.099</td>
<td>-0.065</td>
<td>-0.064</td>
<td>-0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PART1</td>
<td>-0.335</td>
<td>0.135</td>
<td>0.037</td>
<td>-0.012</td>
<td>-0.066</td>
<td>0.595</td>
<td>0.153</td>
<td>0.171</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDTR3</td>
<td>0.127</td>
<td>0.179</td>
<td>0.221</td>
<td>0.344</td>
<td>0.568</td>
<td>-0.044</td>
<td>-0.001</td>
<td>-0.131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOV1</td>
<td>0.210</td>
<td>0.300</td>
<td>-0.046</td>
<td>0.207</td>
<td>0.525</td>
<td>0.133</td>
<td>0.087</td>
<td>0.137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOVT2</td>
<td>0.491</td>
<td>0.222</td>
<td>0.178</td>
<td>-0.111</td>
<td>0.171</td>
<td>0.027</td>
<td>0.244</td>
<td>0.045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDTR2</td>
<td>0.152</td>
<td>0.218</td>
<td>0.144</td>
<td>0.160</td>
<td>0.635</td>
<td>0.110</td>
<td>-0.058</td>
<td>0.201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PART2</td>
<td>0.449</td>
<td>0.161</td>
<td>0.072</td>
<td>0.418</td>
<td>0.197</td>
<td>-0.095</td>
<td>0.074</td>
<td>0.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESELF1</td>
<td>0.117</td>
<td>0.387</td>
<td>0.106</td>
<td>0.320</td>
<td>0.179</td>
<td>-0.087</td>
<td>-0.045</td>
<td>0.148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TACT3</td>
<td>0.033</td>
<td>0.075</td>
<td>0.361</td>
<td>0.653</td>
<td>0.169</td>
<td>0.177</td>
<td>-0.103</td>
<td>0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSELF2</td>
<td>0.144</td>
<td>0.037</td>
<td>0.000</td>
<td>0.837</td>
<td>0.155</td>
<td>0.105</td>
<td>0.066</td>
<td>-0.061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCON2</td>
<td>0.260</td>
<td>0.234</td>
<td>0.252</td>
<td>0.421</td>
<td>0.044</td>
<td>0.003</td>
<td>-0.101</td>
<td>0.355</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SGP2</td>
<td>0.575</td>
<td>0.132</td>
<td>0.109</td>
<td>0.460</td>
<td>-0.055</td>
<td>0.058</td>
<td>-0.118</td>
<td>-0.017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCON3</td>
<td>0.113</td>
<td>-0.071</td>
<td>0.107</td>
<td>0.068</td>
<td>0.087</td>
<td>0.664</td>
<td>0.214</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
mphcev!