Exploring the Relationship between a Typology of Personality Preference and Characteristics of Servant Leadership

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Abstract

The heart of this study was in the person and personality of the servant leader. Lewis, Spears, and Lafferty (2008) emphasized that "organizations are the way they are because of the personalities of the leaders" (p. 15). The principal research purpose was exploration of the intersection between Jungian analytical psychology formulated in personality type theory and Greenleaf's servant leadership philosophy. A psychodynamic, quantitative, semi-idiographic, nonexperimental survey method was used as an effective research design. Personality preference was represented by four predictor variables per the four dimensions of the Myers Briggs Type Indicator® (MBTI®). Using a nontraditional approach, raw score MBTI® data were obtained and linear transformation of the scores performed with associated scale development, creating four continuous type predictor variables. Servant leadership was represented by three criterion variables (vision, empowerment, and service) as measured by three subscales of the Servant Leadership Profile—Revised©. These constructs are found in Patterson's (2003) servant leadership model. Four demographic control variables were used with one asking whether a survey respondent had direct reports within the structure of the research frame. This unique variable provided an opportunity to consider servant leadership as a vertical or horizontal relationship. Hypothesized relationships were tested using multiple regression requiring a minimum sample size of 100 subjects to detect fairly small R^2 values. After assuring that the transformed data met requisite characteristics, three regression models were constructed and one fit model resulted defining a predictive relationship between servant leadership empowerment and the other predictor and control variables.

Dedication

This dissertation is dedicated to the ultimate servant leader, Jesus Christ. There is no greater example and all attempts at mastering servant leadership fall short in comparison. As a follower of Jesus Christ, I have found a life of purpose and perseverance in the declaration that "I have strength for all things in Christ who empowers me. I am ready for anything and equal to anything through him who infuses inner strength into me; I am self-sufficient in Christ's sufficiency" (Phil 4:13, Amplified Bible). Amen and Amen!

Acknowledgements

The scholarly life at times can be narrow and self-focused with long periods of time spent alone. Likewise, the dissertation process at times can be lonely and even described as a season of suffering when the goal of a completed study out prioritizes other important matters of life. Not only does the author suffer, but all those living life in community with the author suffer as well. I acknowledge this group of fellow sufferers without naming them individually. You know who you are and your scars are real.

But I quickly acknowledge that there is a mystical combination of suffering coupled with the multiplication of hope that makes a degree of transient suffering bearable and even worthwhile. There is great contentment in responding to life's calling with a resounding, "Yes, a journey started is a journey completed." I acknowledge this group of fellow travelers without naming them individually. You know who you are and your joy is real.

And finally, there is that rare individual who really "gets it" and, with pleasure, I acknowledge Dr. Mihai Bocarnea, my dissertation chairman. Thank you for modeling excellence throughout the entire Ph.D. journey and especially the dissertation process. And I think it is safe to say that you know who you are and your servant leadership is real.

Table of Contents

List of Tables

List of Figures

Chapter 1 – Introduction

The Center for Applications of Psychological Type (n.d.) reported that more than $10 billion is spent annually on leadership training. Considering this statistic, there is an acknowledged deep-seated need for human leaders in society at large and in the organizations that subdivide people into different groups. Yet, leadership is "one of the most observed and least understood phenomena on earth" (Burns, 1978, p. 2). The Old Testament prophet Zechariah observed that the "people wander like sheep, they are afflicted, because there is no shepherd" (Zech 10:2, New American Standard Bible). Leaders, like shepherds, are necessary and influential. Acknowledging this reality, the heart of this study is in the person and personality of the leader. Allport (1937) declared that "personality is and does something. . . . It is what lies behind specific acts and within the individual" (p. 48). In particular; Lewis et al. (2008) emphasized that "organizations are the way they are because of the personalities of the leaders" (p. 15).

The personal trinity of the leader in body, soul, and spirit is multifaceted, mystical, and mystifying. Much effort has been applied across the ages in attempting to decipher the complexity of the human condition. The modern-day leader faces the challenge of the ancient Greek aphorism to *know thyself* as a life-long learner in search of self-awareness in the human laboratory of developing leadership skills. Naturally, the first step in developing leadership skills is recognizing them in the self (Pearman, 1998). Scholtz (2006) captured this thought in sharing that ancient philosophers such as Socrates believed that the "most important knowledge to be pursued was self-knowledge" (p. 2). The importance of individual self-awareness is a recurrent research theme and a distinct benefit to organizational leaders (Bennis, 2003; Goleman, 1995) in achieving organizational advantage.

Considering the consequential impact of the leader, this research study asks several questions. Is there an intersection between the two distinct research interests of psychological theory and leadership theory that could help inform the ongoing inquiry into the nature of the leader? Specifically, can the personality typology of Jungian psychology as embodied in the Myers Briggs Type Indicator® (MBTI®)

coupled with the characteristics of servant leadership result in a better understanding of both human behavior and leadership theory? More specifically, are there certain personality types that have a stronger or weaker statistical relationship with certain characteristics of servant leadership? Searching for answers to these questions provides the energy that drives the present study.

The remainder of this initial chapter describes the foundation for the research conducted in the study. It explains the background, research problem, and the identified need for the study. Additionally, this introductory chapter includes the purpose of the study and the objectives or suggested outcomes. The chapter concludes with a brief description of the methodology employed in the study, its significance in pursuing the study of organizational leadership, as well as its scope and limitations. Also included is a definition of terms used throughout the study.

Background

Looking for the intersection between psychological theory and leadership theory finds a busy crossroads and carefully approaching it suggests the need for caution and contemplation. One thoroughfare into the intersection encounters such notions as the person of the leader, the quality of personhood, and personality. The term *personality* can be defined as a "dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations" (Ryckman, 2004, p. 97). Jung (1958) declared that it is "only the adult who can achieve personality as the fruit of a full life directed to this end. The achievement of personality means nothing less than the optimum development of the whole individual human being" (p. 42). It is essentially the journey of a lifetime.

Approaching the intersection between psychological theory and leadership theory from another direction finds such notions as influence, behavioral characteristics, and power. Society at large perceives a potential threat from leaders because they possess power and can use this power unwisely for personal profit. Proponents of servant leadership would disagree, espousing that the model servant leader is first and foremost a servant who provides value-added service to others.

This is not a simple task and modern-day leaders, therefore, require a high degree of self-awareness. Bennis (2003) affirmed that "becoming a leader is synonymous with becoming yourself. It is precisely that simple, and it is also that difficult" (p. xxxiii). Again Bennis emphasized that "letting the self emerge is the essential task of leaders" (p. 105). This statement presents itself as a life-long opportunity and challenge for servant leaders to know themselves, first of all as servants, and then become more servant-like via experiential application.

Studies focused on the leader and organizational leadership are pervasive and popular research themes because of their importance in understanding society and human behavior. Fundamentally, "organizations exist in societies and are created by societies" (Ivancevich, Konopaske, & Matteson, 2005, p. 13). Gardner (1990) pointed out the importance of the organizational leader stating that "leaders have a significant role in creating the state of mind that is the society." (p. 191).

Organizational leaders do not operate independently but engage in dyadic person-to-person relationships with other individuals for the purpose of achieving mutual goals and objectives. On a cautionary note, Beauchamp and Bowie (1988) instructed that "persons must be treated as having their own autonomously established goals and must never be treated purely as the means to another's personal goals" (p. 37). However, it is clearly the leader who initiates action and encourages necessary change using their personality to influentially make a difference. Much importance is placed on the person of the leader and Anderson (1998) suggested that the function of "leadership is the primary factor that distinguishes organizations from one another in the long run" (p. 13).

Organizations consist of diverse groups of people that also possess individual diversity in the form of distinct personalities that can be recognized by characteristic patterns of thoughts, feelings, and behaviors. The personality of individual leaders and their personal leadership behaviors significantly impact organizations. The importance of personality as a variable in the study of leadership has been well established in prior research (Avolio & Howell, 1992). More explicitly, the juncture between psychological theory and leadership theory is

knotted in the personal behavior of the leader that emerges from the unique personality of that person.

Perspectives from Personhood

Leaders are individual persons who possess the quality or characteristic of personhood. Although not a term heard often in casual conversation, *personhood* is defined as the "state or condition of being a person, especially having those qualities that confer distinct individuality" (Corsini, 1999, p. 544). Individuality is an essential notion in appreciating the personhood of a leader. The European or Western concept of personhood is a relatively new concept and not an innate quality that is intuitively obvious. Rather, different cultures have historically used the term *manhood* and have developed different expectations for achieving this designation. Personhood is genderless and carries with it some form of self-awareness or rationality (C. Taylor, 1985).

Self-awareness theory posits that when a person consciously directs attention towards themselves they are able to evaluate and compare their behavior to their own internal beliefs, values, and assumptions (Duval & Wicklund, 1972; Silvia & Duval, 2001). *Self-awareness* refers to "having awareness of, and trust in, one's motives, feelings, desires, and self-relevant cognitions" (Kernis, 2003, p. 13) which includes an awareness of one's strengths and weaknesses as well as a person's impact on others (Fletcher & Baldry, 2000; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Self-aware leaders are better able to understand and align internal values with external behaviors.

Individual leaders as organizational actors possessing the quality of personhood make a difference and have significant persuasive power over the organizations they serve as part of society. This is evidenced in *actor specific theory* that was developed to help analyze foreign policy formulation as part of a larger understanding of international relationships and political decision making. The theory is "based upon the argument that all that occurs between nations and across nations is grounded in human decision makers acting singly or in groups" (Hudson, 2005, p. 1). Each of these human decision makers has a unique

personality that shapes their leadership style and their participatory behavior in international affairs.

Although the Bible is not a psychology textbook, it speaks in both the Old Testament and New Testament to the nature of a person as an individual personality, explaining, "the LORD God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being" (Gen. 2:7) and "it is written, the first man Adam became a living being" (1 Cor. 15:45). The suggestion that a person has a unique inner life and inner consciousness emanates from a Christian belief system that places every person as an independent moral entity with an autonomous relationship to God. "The premise of uniqueness is fully in accord with a theological anthropology which starts from the presupposition that the selfness of all human beings is determined by the concept of man created in the *imago Dei*" (A .R. Tucker, 2011, p. 299). Every person possessing the quality of personhood is an original creation. The understanding of the personhood of a leader is an essential element in the study of organizational leadership (Carrithers, Collins, & Lukes, 1985). Anthony (2004) compellingly summarized that "if the principle of personhood can transcend all of our research, training, and services; good things will follow" (p. 205). An intentional and proper focus on the person and personality of the leader is appropriate for the present study.

Perspectives from Psychological Theory

The term *psychology* is simply defined as the scientific study of the behavior of individuals and their mental processes. A more complete treatment of the term defines psychology as the "study of the mind and behavior. The discipline embraces all aspects of the human experience from the functions of the brain to the actions of nations, from child development to care for the aged" ("Psychology," n.d.). Aligning with this definition, it is correct to say that psychologists endeavor to understand the behavior of individual persons as well as groups of individuals. The person of the leader is a primary subject of psychological interest and research.

Historically, Carl Jung (1875-1961) developed the school of psychology known as analytical psychology. He placed emphasis on spiritual development and

premised that a person could continue to grow spiritually and psychologically throughout a lifetime via a process he termed *individuation* or achieving completeness. One of Jung's most significant contributions to psychology was the development of a theory of personality type or temperament as a way of classifying people into different dichotomous categories. He concluded that a typology of personality was possible that would identify how a person preferred to cope with the world and life in general (Jung, 1921). His interest in a typology of personality differences began with his desire to better appreciate and understand the diverse theories of Freud, the founder of psychoanalysis, and Alfred Adler, the founder of individual psychology. Jung (1983) wrote that "in attempting to answer this question [regarding personality], I came across the problem of types; for it is one's psychological type which from the outset determines and limits a person's judgment" (p. 207).

Personality or psychological type refers to "distinct patterns of personality characteristics used to assign people to categories; qualitative differences, rather than differences in degree, used to discriminate among people" ("Personality Type," n.d.). Personality refers to the "unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (both overt and covert) across different situations and over time" ("Personality," n.d.). A more exhaustive definition of personality is provided by VandenBos (2007) in the *APA Dictionary of Psychology* as:

> The configuration of characteristics and behavior that comprises an individual's unique adjustment to life, including major traits, interests, drives, values, self-concept, abilities, and emotional patterns. Personality is generally viewed as a complex, dynamic integration or totality, shaped by many forces, including hereditary and constitutional tendencies; physical maturation; early training; identification with significant individuals and groups; culturally conditioned values and roles; and critical experiences and relationships. Various theories explain the structure and development of personality in different ways, but all agree that personality helps determine behavior. (p. 689)

Jung's (1921) study of the ego led to his formulation of psychological type theory that classified people into dissimilar groups according to their particular personality preferences. When the foundational work of Jung was translated from German into

English and then read by Katharine Cook Briggs (1875-1968), there was a revolutionary recognition on her part that Jung's typology of personality differences best described human behavior and its development. She abandoned her own work, redirected her efforts toward understanding the work of Jung, and began observing people through the lens of psychological type. The goal of her ongoing efforts was to formulate a way to inform individuals regarding their personality type and bring meaning to this self-awareness.

In 1941, at the beginning of World War II, Katharine's daughter, Isabel Briggs Myers (1897-1980) was convinced of the need for a personality type assessment tool and she was joined in the effort to create such a tool by her mother, Katharine, and her father, Lyman Briggs (1874-1963), who was a scientist by profession and acquainted with statistical processes. After a period of early development and especially since 1970, the MBTI® has grown in terms of usage and consequence. Edwards, Lanning, and Hooker (2002) noted that Jung's type theory was the "basis of a number of instruments, but the most popular of these is the Myers Briggs Type Indicator . . . and it is certainly one of the best known personality inventories among non-psychologists" (p. 433).

Perspectives From Leadership Theory

Leaders are influential actors in their various and diverse operating environments. They demonstrate the function of leadership that has been "traditionally conceptualized as an individual-level skill. A good example of this is found in transformational leadership theory, which proposes that transformational leaders engage in behaviors related to the dimensions of Charisma, Intellectual Stimulation, and Individualized Consideration" (Day, 2000, p. 583). Yet in spite of sincerely developed, well promoted, and genuinely popular leadership development programs, modern society is plagued with problems that are rooted in poor leadership.

Greenleaf (1978) observed the problems in society and concluded there was a "leadership crisis" (p. 77). He suggested that the institutions of society such as universities and seminaries had failed to prepare a generation of men and women for leadership roles. The decades since the 1970s have seen ongoing leadership

crises that point to a failure in essential personal behavioral qualities. Doyle (2012) addressed the ongoing economic turmoil in the U.S. concluding that:

> The fixation on appearance and monetary gain at the expense of doing the right thing is both bad business policy and bad public policy. Yet it persists because of a lack of real character and leadership. Our current crisis may be deemed an economic crisis, but in truth it is a crisis of leadership.

To date, no one has suggested that personal leadership failures have come to an end in the economic, religious, or corporate sectors of society (Liu, 2010).

Greenleaf's (1970, 1977, 1978) response to this well-recognized problem was the formulation of servant leadership as a viable style of leadership. He asked the probing questions, "Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely to become servants? Will the least privileged of the society be benefited or at least not further deprived?" (Greenleaf, 1977, p. 27). The essence of servant leadership is the notion of service by the leader as a first priority and benefit to others. The dichotomous term *servant leader* seems almost contradictory depending on the chosen definition of a leader. Greenleaf emphasized that the true servant leader is a servant first at the core of their being and after that comes the aspiration for and addition of leadership. There are many historical examples of servant leaders (e.g., Mohandas Gandhi, Billy Graham, Mother Teresa), but the pinnacle of a servant leader was Jesus Christ who proclaimed, "For even the Son of Man did not come to be served, but to serve" (Mark 10:45).

Servant leadership can be thought of and defined in different ways, but it is essentially a service-oriented style of leadership. Nair (1994) instructed:

> As long as power dominates our thinking about leadership, we cannot move toward a higher standard of leadership. We must place service at the core; for even though power will always be associated with leadership, it has only one legitimate use: service. (p. 145)

The emphasis on service and the servant-first aspect of servant leadership creates an expectation that the person of the leader will have a self-aware, well-developed personality and be engaged in continuous growth as a life-long learner regarding

their own individuation and what it means to be in relationship with others (Roberts, O'Donnell, & Robins, 2004).

Statement of the Research Problem Based on Need

Simply stated, Bordens and Abbott (2005) defined *research* as "the principal method for acquiring knowledge and uncovering the causes for behavior" (p. G-9), and Creswell (2003) defined a *research problem* as "an issue or concern that needs to be addressed" (p. 21). Recalling the essence of this study, it was posited that a better understanding of both psychologically based human behavior and leadership theory could be achieved by identifying relationships between the personality typology of Jungian psychology as embodied in the MBTI® and specific characteristics of servant leadership.

Scholarly investigation has resulted in several models of servant leadership that have been modified and expanded by different researchers (Cerff & Winston, 2006; Patterson, 2003; Spears, 1998; Winston, 2003). At the heart of these models were the core servant leadership characteristics of vision, empowerment, and service. As a result of their original inclusion in early models of servant leadership and their continuation over time, these three behavioral attributes were the focus of the present investigation. Identifying the relationship between these three servant leadership characteristics and the MBTI® personality preferences of leaders was the research problem that sustained the present study.

The subject discourse quantitatively began answering the qualitative call for this form of research from Lewis et al. (2008) in their question:

> Larry: I'm also wondering if there [are] ways in which servant-leadership might somehow inform, or add to the knowledge base of the utility of the Myers Briggs type indicator. What do you see as the potential benefit and uses of MBTI, or even Jungian thought, in the ongoing development of servant-leaders and servant-leadership?
>
> Ralph: I absolutely think that the Myers-Briggs contributes an enormous amount. I think that to direct the Myers-Briggs in terms of servant-leadership and how you use your gifts to fulfill Robert Greenleaf's Best Test is critical. (p. 9)

The traditional notion of leadership involves a dyadic leader–follower relationship. Servant leadership is uniquely different in that it is not necessarily a positional form of leadership. Lewis et al. (2008) clarified, stating:

> Ralph: Service comes in all shapes and sizes. You can have practical service, social service, theoretical service, and idealistic service. . . . I think that any discussion on type and service really needs to emphasize that every single person, whatever their typology, has the potential to be a fantastic servant-leader according to their gifts. (p. 9)

There is no explicit requirement here for a servant leader to have direct reports or employees as part of a traditional vertical form of organizational structure.

Investigating the intersection between personality type theory and servant leadership is a worthy pursuit that hinges on coupling the pursuit of self-awareness with a behaviorally-based leadership style. It is about a leader discovering their personality preferences and then using that self-awareness over a lifetime in identifying and developing requisite servant leadership skills. Hock (2008) emphasized this challenge in suggesting that "here is the very heart and soul of the matter of leadership: If you seek to lead, invest 50% of your time (attention) leading yourself—your own purpose, ethics, principles, motivation, conduct" (p. 17). Extending this thought, Bennis (2003) affirmed that the "most dangerous leadership myth is that leaders are born—that there is a genetic factor to leadership. This myth asserts that people simply either have certain charismatic qualities or not. That's nonsense; in fact, the opposite is true" (p. 32). This perspective suggests that leadership development is largely the personal responsibility of the leader. Bennis went on to assert that "leaders are made, not born, and made more by themselves than by any external means" (p. xxix). It was this insightful statement that served as the impetus for the subject research.

The study of servant leadership is under researched as a beneficial model of leadership that offers great potential in shaping effective organizational environments guided by leaders who are self-aware and actively engaged in developing their own personalities. Rather extensive research has been accomplished in the study of transactional and transformational leadership theory (Bono & Judge, 2004; Judge, Bono, Ilies, & Gerhardt, 2002; Judge & Piccolo,

2004), suggesting an evolutionary progression of theory development with transformational leadership as an extension of transactional leadership theory. Avolio (1999) noted that "transactions are at the base of transformations" (p. 37). Servant leadership, as a philosophy of leadership, may be either a subset of transformational leadership theory or a not yet understood extension of it. The subject research linking the distinct areas of psychology and servant leadership will add to the body of knowledge regarding this question.

The correlation between Jungian type theory as represented by the MBTI® and different theories of leadership has been explored in prior research but there is much more to accomplish in extending earlier studies and venturing into new research contexts. However, there has been very little research in empirically exploring the relationship between Jungian type theory as represented by the MBTI® and the study of servant leadership. Waddell (2006) qualitatively suggested that servant leaders have a personality preference for introversion rather than extraversion, but this premise remained empirically untested until the present time in this study.

Additionally, Lewis et al. (2008) qualitatively mapped the four dominant functions of the Myers Briggs personality type designations to 10 characteristics of servant leadership, providing examples of historical figures who may have exhibited this personality type in service to others. They summarized their efforts stating that it "represents our best thinking on this subject, but it is also completely untested. It is our hope that this may inspire others to find ways to put these theories to the test" (p. 19). This call for empirically exploring the personality type of servant leaders offered primary support for the current study.

Philosophically, at the heart of both the personality type work embodied in the MBTI® and the impetus of servant leadership is the notion of assisting people to move from their current place of self-awareness as persons to a better, more developed place that includes a mutual understanding about themselves and other persons. Lewis et al. (2008) enhanced this idea by clarifying that:

> The core essence about both Myers-Briggs and servant-leadership is about helping people, acknowledging people as they are, and accepting them as they are. Greenleaf's best test about meeting people's highest

> priority needs could be applied in light of each type's gifts and preferences: Are people healthier, wiser, freer, more autonomous, more likely themselves to become servants? (p. 13)

Note that Greenleaf's question essentially requires an answer that includes a measure of personal self-understanding that emerges from the relationship between a servant leader and other individuals. However, it is the leader who remains the primary actor in the relationship.

Finally, the subject research was needful and significant because servant leadership was grounded in the personality and character of the servant leader. This relationship is not well understood via empirical research. Bell and Habel (2009) came to the conclusion that "a servant leader's vision for leadership was integral to the character of that person. For me, that would mean, 'I do servant leadership because of my character (who I am)'" (p. 18). Leadership demands ongoing action in the way of continuous development of personality. Bell and Habel go on to emphasize that "I knew from my reading of the literature . . . that the first step toward effective leadership is self-awareness" (p. 18).

The arguments presented in this section established the need and rationale for empirical investigation of the subject research problem.

Purpose of the Study

Lafferty in Lewis et al. (2008) philosophically stated, "I think Jung used a lot more obscure and mystical language, but ultimately, at the core, I think that there is a degree of overlap between Jung and Greenleaf" (p. 14). The principal purpose of the presented research study was to explore that overlap or the cross roads of Jungian analytical psychology formulated in personality type theory and as depicted in the MBTI®, looking for relationships with the specific servant leadership characteristics of vision, empowerment, and service as lived out in the behavior of the person of the leader. This endeavor was postulated on the importance of the leader's personality in formulating personal behavior and thereby influencing organizational life.

Bennis (2003) identified "three basic reasons why leaders are important. First, they are responsible for the effectiveness of organizations" (p. 4). An

assumption was made that effective organizations are led by leaders who are self-aware and interested in developing their leadership skills. Leaders who aspire to intentionally living out principles of servant leadership and who know their personality type are aligned with this assumption. Bennis asserted that "taking charge of your own learning is a part of taking charge of your life, which is the *sine qua non* in becoming an integrated person" (p. xxx). Leaders are integrated persons with full personalities matured by reason of intentional development.

Regarding the importance of leaders, Bennis (2003) went on to suggest that "second, the change and upheaval of the past years has left us with no place to hide. We need anchors in our lives, something like a trim tab factor, a guiding purpose. Leaders fill that need" (p. 4). An assumption was made that servant leaders who are cognizant of their personality type are anchored in self-awareness and better able to fulfill the function of leadership that provides guidance to others.

Finally, Bennis (2003) observed that "third, there is a pervasive national concern about the integrity of our institutions" (p. 4) that began with the excesses and tarnished reputations of Wall Street executives beginning during the 1980s. An assumption was made that servant leaders are ethical leaders and their values are influential in establishing the ethical climate of their organizations (Burns, 1978; Greenleaf, 1970; Heifetz, 1994).

In addition to aligning with the work of Bennis (2003), the three specific research objectives of this study were (a) to respond to the explicit and implicit call for empirical research to show relationship between the MBTI® with different characteristics of servant leadership (Lewis et al., 2008; Waddell, 2006); (b) to empirically test the theorized proposition that a typology of Jungian psychology as embodied in the MBTI® coupled with the three servant leadership characteristics of vision, empowerment, and service will result in a better understanding of both human behavior and leadership theory; and (c) to establish a framework for the ongoing pursuit of knowledge regarding a typology of personality as it relates to the study of servant leadership.

Objectives

The objective or anticipated outcome of this study was not only to advance the understanding of servant leadership as a philosophy of leadership that is valid and appropriate in modern organizations, but also to provide the person of the servant leader a tool in the way of the MBTI® to use in the practice and practical application of servant leadership. Mapping personality preference to the specific servant leadership characteristics of vision, empowerment, and service allows the leader insight and perspectives into their own leadership style as a way of sharpening both personal and organizational influence. Lewis et al. (2008) summarized the difficulty of the leadership challenge by acknowledging "it is a lifelong challenge to serve other people, to serve ourselves, to develop, and to grow. The richness and the complexity of that are enormous" (p. 14).

Organizational leaders are the difference makers in achieving a measure of strategic advantage over competitors. Pfeffer (1998) suggested that an often overlooked "source of economic success is largely based on a perspective that sees the development of people-based strategies as crucial for long-term economic performance" (p. 5). The development of leaders based on a better understanding of leader personality preference and behavior is a long-term organizational advantage that aligns with Pfeffer's statement.

Methodology

A quantitative, nonexperimental survey method was used in the present study in which the tested variables were measured using two reliable and validated survey instruments. The hypothesized relationships in the study are presented at the conclusion of Chapter 2. Personality preference was represented by four independent or predictor variables and the servant leadership characteristics of vision, empowerment, and service were the three dependent or criterion variables. The research design used the MBTI® to assess self-reported personality preference and the Servant Leadership Profile—Revised© (SLP-R©; Wong & Page, 2003) was used to assess self-reported servant leadership characteristics. The three key attributes of vision, empowerment, and service were identified early in the

formulation of servant leadership behavioral attributes and remain in present testable models. In support of the selection of these characteristics in the present study, a previously conducted factor analysis validated the measurement of these attributes within the overall structure of the SLP-R© (Dennis & Winston, 2003). These three scales, composed of 32 total items, were used to evaluate the postulated relationships among the research variables.

The study employed four intervening or control variables to obtain demographic information from survey subjects as a way to assess or clarify the relationship between the predictor and criterion variables. Data was obtained pertaining to gender, age, years of employment, and whether the survey subject had direct reports per the organizational structure of the research setting.

An individual level of analysis was utilized because the focus of the study was on the person of the leader rather than a group or organization. At the individual level of analysis, behavior often involves the study of personality and psychology as are fitting to this study. The MBTI® concerns itself with assessing personality type at the self-reported individual level. Likewise, the SLP-R© was developed as a self-report tool to obtain information from individual servant leaders. A quantitative, nonexperimental survey method using these two instruments was used as an effective research design for data collection and the aggregated numerical data was later used for inferential statistical analyses.

Significance of the Study

The problematic issues that face society today have been fundamentally traced to a *crisis of leadership*. The timing for this study intersects the present leadership crisis that can be traced to the personal failure of organizational leaders as evidenced by business failures typified by Enron, WorldCom, Tyco, Adelphia Communications, etc. Religious institutions have not escaped this crisis with the recent fall of more than one well-regarded megachurch leader. The recent events at Pennsylvania State University sadly depict a catastrophic collapse of moral leadership. Maxwell (2007) declared that “everything rises and falls on leadership” (p. vii). Therefore, since leadership is the primary function of a leader, it follows

that the person of the leader is being severely challenged by conditions that exist in modern-day societal environments. The reality of failed leadership is particularly offensive to successful leaders since there has been much interest and a recent surge in both the popular and scholarly study of leaders and the organizations that they serve. Successful or not, leaders need experienced-based assistance and support to fulfill their leadership roles.

This study, for the first time, takes the well-established MBTI® based in Jung's typology of personality and empirically looks at servant leadership behaviors in a very large megachurch environment. This is an important and useful aspect of this study, as described by Lewis et al. (2008) stating, "I think that it would be exciting to do some work to help, whatever a person's type, to help them understand how they can use those gifts in the service of others in servant-leadership terms" (p. 17). There is an implicit appeal here for rethinking and perhaps broadening the definition of a servant leader. A servant leader need not have an organizational title or possess positional authority to be of service to others. Leadership emanates from the person or personality of the leader in expressions of service that add value to the working environment and society in general. Lewis et al. suggested that "any discussion on type and service really needs to emphasize that every single person, whatever their typology, has the potential to be a fantastic servant-leader according to their gifts" (p. 9).

This study purposely linked the concepts of personality typology and servant leadership behaviors which is a novel relationship. It also positioned itself alongside other studies as an aid for aspiring and practicing servant leaders to understand and develop their leadership skills (Dennis & Winston, 2003). The significance of this approach was a deeper and fuller appreciation of the personality type or preference on the part of a leader but, in addition, a better appreciation for the differences in personality type observed in others. The result was a more constructive use of these differences or, as posited by Lewis et al. (2008), it explained how "servant-leadership gives each type a positive way to apply the gifts each one has to offer" (p. 9). This is of practical use to the individual, the organization, and society as a whole.

Finally, this study is significant since it was premised on the personhood and personality of the leader. Failure to capture the meaning and impact of personhood would influence the research design and the interpretation of the results. The transcendent notion of personhood places emphasis on the personality of the leader and the idea of the uniqueness of that person. It aligns well with the biblical notion of the God-given giftedness embedded in each individual:

> Since we have gifts that differ according to the grace given to us, each of us is to exercise them accordingly: if prophecy, according to the proportion of his faith; if service, in his serving; or he who teaches, in his teaching; or he who exhorts, in his exhortation; he who gives, with liberality; he who leads, with diligence; he who shows mercy, with cheerfulness. (Rom. 12:6-8)

Real strategic advantage is gained when the leader recognizes and fully employs their own giftedness *with diligence* in service to others.

Scope and Limitations

This study establishes relationship between Jung's (1921) well-recognized personality type theory and Greenleaf's (1977) relatively new formulation of servant leadership. The need for empirical research in this area has been identified (Lewis et al., 2008), but insufficient work has been accomplished spanning these research interests. The scope of the study was shaped by the purposeful choice of the research setting as a very large megachurch which is an understudied leadership research environment. Servant leadership is espoused by the leaders of secular and nonsecular, nonprofit and for-profit organizations. Greenleaf emphasized the spiritual component of the person of the leader in proposing that "the servant-leader is servant first. It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead" (Greenleaf, 1998, p. 1). Because of the *natural feeling* terminology chosen by Greenleaf as a component of personality and the notion of religious institutions as service organizations, the research setting for this study was a single, modern-day, very large megachurch. The megachurch movement in the U. S. has grown steadily since the late 1990s and remains a very under researched setting for leadership studies.

This study employed a psychodynamic approach with a sharp focus on the personality type of the leader. It used objective rather than subjective survey instruments with the assumption that personality is accessible and can be measured through a self-report process. The limitation in this well-practiced research design is the actual survey respondent and their degree of self-awareness regarding their own personality and the answers they provide to each question. Roberts, Harms, Smith, Wood, and Webb (2006) noted that "one of the persistent disputes in personality psychology is between those who believe that self-reports or observer methods should hold priority in the field" (p. 326). A person that has a relatively low degree of self-awareness may not provide accurate descriptions of their own behavior.

Similar to the first limitation is the Forer effect that is concerned with the survey respondent and the validity of their response. Forer (1949) demonstrated that individuals interpret personality tests as if they were designed uniquely for them rather than a more general description that equally applies to everyone. Different psychological traits can be found in every person to some degree. Individual uniqueness "lies in the relative importance of the various personality forces in determining his behavior and in the relative magnitude of these traits in comparison with other persons" (Forer, 1949, p. 118). Although the MBTI® has been used for decades with thousands of individuals, the Forer effect is a limitation for this study because different people have different degrees of self-awareness that could affect their scoring. The person of the leader is a unique configuration of specific behaviors that are common to everyone.

A third potential limitation is the question of consistency on the part of the survey respondent. Consistency asks if a person behaves the same way in different situations or at least if a person's behavior is predictable in different environments such as work and/or at home. Individuals are concerned with managing their identity and have the inclination to act in such a way that promotes a desired result (Berger & Luckmann, 1967) rather than being genuine or better aligned with self. Research subjects were aware that the focus of the research was personality type and servant leadership and this may have influenced their responses.

Definition of Terms

Theories of communication abound (Eisenberg & Goodall, 2004) and much has been written about different ways of transferring meaning. One theory of communication suggests that information transfer is analogous to a pipeline (Axley, 1984) where information flows from communicator to recipient with minimal spillage. This present study follows Axley's imagery and employs a metaphorical conduit of communication since it was in written form and offered little opportunity for dialogue. Therefore, in order to be understood, the thoughts and feelings of the author were intentionally converted into words that provided meaning to the reader. To enable clarity in communication and minimize misunderstanding, the following terms used throughout the study are listed in alphabetical order with specific definitions.

This section is important because (a) Jungian terminology and meaning is sometimes obscure and difficult to understand, and (b) the scholarly study of servant leadership is progressing and the need for clear definitions and terminology is required to preclude confusion of vocabulary and meaning among parallel studies (Laub, 2004).

Attitude. Refers to either introversion or extraversion and means "an essential bias which conditions the whole psychic process, establishes the habitual mode of reaction, and thus determines not only the style of behavior but also the quality of subjective experience" (Jung, 1921, p. 34).

Leader. Per Laub (2004), "a leader is a person who sees a vision, takes action toward the vision, and mobilizes others to become partners in pursuing change" (p. 4).

Leadership. Per Laub (2004), "leadership is an intentional change process through which leaders and followers, joined by a shared purpose, initiate action to pursue a common vision" (p. 5).

Megachurch. A megachurch is defined as a "Protestant congregation with a sustained average weekly attendance of 2,000 persons or more in its worship services" ("Megachurch," n.d.).

Personality. Per Ryckman (2004), personality is "a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations" (p. 97).

Personality. Refers to the "unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (both overt and covert) across different situations and over time" ("Personality," n.d.).

Personality or psychological type. Refers to the "distinct patterns of personality characteristics used to assign people to categories; qualitative differences, rather than differences in degree, used to discriminate among people" ("Personality Type," n.d.).

Personhood. Refers to the "state or condition of being a person, especially having those qualities that confer distinct individuality" (Corsini, 1999, p.544).

Psychodynamic personality theories. Refers to theories of personality that share the assumption that personality is shaped by and behavior is motivated by powerful inner forces.

Psychodynamic perspective. Refers to a "psychological model in which behavior is explained in terms of past experiences and motivational forces; actions are viewed as stemming from inherited instincts, biological drives, and attempts to resolve conflicts between personal needs and social requirements" ("Psycholodynamic Perspective," n.d.).

Psychological type theory. Refers to a theory of categorical personality differences in behavior that result from people's inborn tendencies. As people act on these tendencies, they develop patterns of behavior. Jung's original psychological type theory defined eight different patterns of behavior (Kirby & Meyers, 1998).

*Psychology. S*imply defined as the "scientific study of the behavior of individuals and their mental processes" or more completely defined the "study of the mind and behavior. The discipline embraces all aspects of the human experience—from the functions of the brain to the actions of nations, from child development to care for the aged" ("Psychology," n.d.).

Research. Refers to the "principal method for acquiring knowledge and uncovering the causes for behavior" (Bordens & Abbott, 2005, p. G-9).

Research problem. Creswell (2003) defined a research problem as "an issue or concern that needs to be addressed" (p. 21).

Self-awareness. Refers to "having awareness of, and trust in, one's motives, feelings, desires, and self-relevant cognitions" (Kernis, 2003, p. 13) including an awareness of strengths and weaknesses and their impact on others (Fletcher & Baldry, 2000; Walumbwa et al., 2008).

Servant leader. Patterson (2003) defined a servant leader as one who "leads an organization by focusing on their followers such that the followers are the primary concern and organizational concerns are peripheral" (p. 5). The present study accepts Patterson's definition and supplements it by defining a servant leader as "any organizational member who positively influences another organizational member using behavioral characteristics of servant leadership."

Servant leadership. Refers to the style of leadership defined and promoted by Greenleaf (1977) wherein a leader is first a servant prior to becoming a leader. Laub (1999) defined servant leadership as "an understanding and practice of leadership that places the good of those led over the self-interest of the leader" (p. 81).

Temperament. Refers to a psychological term that highlights those aspects of an individual's personality, such as introversion or extraversion, which are often regarded as innate rather than learned.

Typology. Refers to the study or systematic classification of types that have characteristics or traits in common.

Very-large megachurch. Refers to a Protestant Christian congregation with a sustained attendance of at least 15,000 persons who meet locally in weekly worship services.

Organization and Summary of the Study

This opening chapter presented a compelling narrative that described the need to investigate the link between a typology of personality preference as

proposed by Jung and later enabled by the work of Myers and Briggs in the MBTI® with Geenleaf's servant leadership characteristics of vision, empowerment, and service. It summarized the call for the research, set forth the conceptual framework for conducting the study, explained the significance of the study, and defined the scope and limitations of the study.

Looking ahead, Chapter 2 provides a comprehensive review of the literature relevant to the study, concluding with the testable hypotheses that suggest a relationship between a typology of personality and three behavioral characteristics of servant leadership. Chapter 3 describes the methodology used for conducting the study and presents descriptive statistics regarding the aggregated data collected during the study. Chapter 4 presents the results of inferential statistical analyses used to accept or reject the research hypotheses. Chapter 5 concludes the subject discourse with a discussion of the results that emerged from Chapter 4.

Chapter 2 – Literature Review

The underlying theme of the present study was exploration of the intersection between the two distinct research interests of Jung's (1921) analytical psychology and Greenleaf's (1977) philosophy of servant leadership, looking at how the personality preferences of a leader impacted the servant leadership behaviors of vision, empowerment, and service. In order to carry out the study, it was necessary to first establish a solid basis from which to work that included the theoretical foundations and hypothesized relationships between the two separate research interests. This was accomplished via the Chapter 2 comprehensive literature review that serves "to relate the present study to the ongoing dialogue in the literature and to provide a framework for comparing results of [this] study with other studies" (Creswell, 2003, p. 46). It examined the literature regarding Jung's typology of personality preference and Greenleaf's philosophy of servant leadership which then led to identification of specific hypotheses and their testable relationships as defined at the end of the chapter.

The literature review was based on a fully connected model (see Figure 1) showing how Jungian psychology and Greenleaf's servant leadership begin with a common base then separate into two distinct research subjects and finally rejoin in the individual person of the leader.

The chapter begins with an overview of the principles of personhood and spirituality that both rest at the heart of the study as it relates to the person of the leader. It moves on to explore Jungian analytical psychology and the typology of personality as embodied in the Myers Briggs Type Indicator® (MBTI®) formulated by Myers and Briggs (Myers, McCaulley, Quenk, & Hammer, 2003). The chapter continues with a review of leadership theory and a theoretical understanding of servant leadership, identifying the behavioral characteristics of the servant leader as defined in contemporary literature. The chapter concludes with a statement of the hypotheses tested in this study that emerged from the literature review.

Common Basis of Personhood and Spirituality

Jung's (1921) analytical psychology and his work in theorizing a typology of personality is seemingly an entirely separate concept from the philosophy of servant leadership as proposed by Greenleaf (1977). Yet, there is a crossing point between the two, and it exists in the concept of the personhood or individuality of the person or, in the case of this study, the person of the leader. There is also a spiritual component shared by Jung's analytical psychology and Greenleaf's servant leadership philosophy presented in this section.

Common Ground of Personhood

Simply stated, a person is a living human and, as such, is an individual endowed with character and personality (Pittenger, 1964). There is an assumption made that each human person possesses an individual uniqueness that is expressed in the notion of personhood (Spitzer, 1998). The study of personality and the behavioral disposition of that personality is the study of a unique person. Every person is distinct from every other person and worthy of study. "Perhaps the most convincing argument for the uniqueness of each individual created by God is the teleological doctrine of God's personal judgement [*sic*] of every individual" (A .R. Tucker, 2011, p. 299). Anything less than a full appreciation of the notion of personhood works against the study, its theoretical basis in psychology and leadership research, and the tested hypotheses, as well as the statistical sense making associated with the quantitative data gathered in the study.

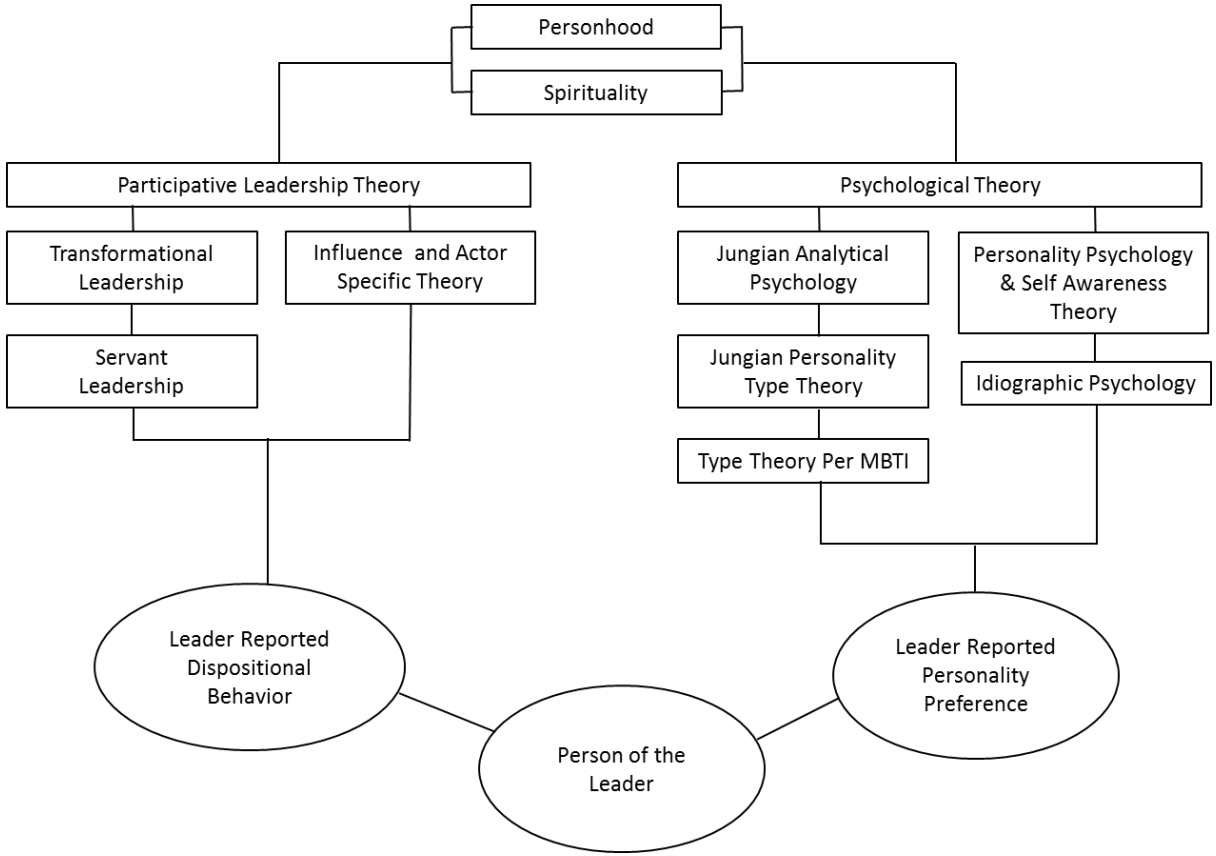

Figure 1: Fully connected model showing associative relationship between psychological theory and leadership theory.

From a psychological perspective, the European or Western perception of a person as an independent creation was not the norm throughout history but evolved over time with an influence from different philosophical, legal, and religious customs. Traditionally the term *manhood* was used in different cultures rather than the genderless term *personhood* and carried with it certain distinctions. John Locke's theories of personhood (Mattern, 1980; Wiredu, 2009) and personal identity (Spector, 2008) helped shape Western thinking regarding the nature and definition of a person (Carrithers et al., 1985). In Western philosophy, a person is one who is conscious or alive and, as a result, is capable of framing representations about the world, formulating plans, and then taking action to bring them to fruition (C. Taylor, 1985). It is interesting to observe that this description serves as a generic definition of a leader indicating that, in some regard, every person is first a self-aware leader of themselves and then others.

One of the mysteries of mankind is the ethereal essence of a unique person that is described in such terms as soul, spirit, psyche, or mind. Just as there is no single, comprehensive definition of the term *person*, there is no general agreement on the meaning of these other terms or the qualities of personhood that define a person. It is well beyond the scope of this study to engage in a definitive treatise that maps the conclusions of literally generations of thinkers, philosophers, and theologians regarding these subjects. For example, looking at self-awareness as a defining characteristic of a person, Warren (1997) suggested that the "six key markers of personhood are: 1) sentience . . . 2) emotionality . . . 3) reason . . . 4) capacity to communicate . . . 5) self-awareness . . . 6) moral agency" (pp. 83-84). When a person is self-aware, they have a deep understanding of their own emotions, strengths, weaknesses, needs, and motivations (Silvia & Duval, 2001). Warren's indicators are not tests of personhood but attributes of it. Missing from this list is any explicit notion of the *soul of man* in defining a person. Likewise, Spector (2008) argued that there exist "some important features of self-awareness and personhood without resorting to any metaphysical suppositions such as soul, essence or spirit" (p. 256). Yet, Jung (1983) pointed out the importance of the soul, stating that "even the believing Christian does not know God's hidden ways and

must leave him to decide whether he will work on man from outside or from within, through the soul" (p. 260). There is an abundance of literature in the dogma of many religions that expressly defines the existence of the soul as part of being human. In summary, there are manifold and profound arguments promoting different points of view when it comes to defining what it means to be a person and the quality of personhood. There is unity in recognizing the terms and diversity in defining them.

Common Ground of Spirituality

Also, at the outset of this literature review, it is important to establish that there is a spiritual component that is shared by Jung's (1921) analytical psychology and Greenleaf's (1977) servant leadership. Jung was not hesitant in exploring the world of religion and spirituality as part of his understanding of humanity. Jung (1983) declared:

> I have been accused of "deifying the soul." Not I but God himself has deified it! I did not attribute a religious function to the soul, I merely produced the facts which prove that the soul possesses a religious function. I did not invent or insinuate this function. (p. 262)

Jung accepted that man was a creature with a physical or conscious part as well as an immaterial or spiritual part that he termed *soul*.

Similarly, there is a spiritual basis in Greenleaf's (1977) servant leadership (Sendjaya & Sarros, 2002). The words and life of Jesus Christ have been used to exemplify the behavior of a servant leader. Speaking to his disciples, Jesus said:

> You know that the rulers of the Gentiles lord it over them, and their high officials exercise authority over them. Not so with you. Instead, whoever wants to become great among you must be your servant, and whoever wants to be first must be your slave—just as the Son of Man did not come to be served, but to serve. (Matt. 20:24-28)

Jesus pointed out how spiritual values impacted all of life and across the ages specifically highlighted a nontraditional 20th-century leadership style.

Psychological Theory and Personality Psychology

Epistemologically, the root word of psychology is *psyche* and its use dates back to ancient times meaning *life* in the Greek. Derived meanings denote the

notion of spirit and ultimately self or conscious personality (Liddell & Scott, n.d.). *Psychology* is simply defined as the scientific study of the behavior of individuals and their mental processes. This straightforward definition belies a complex field of study with a broad scope of interests including personality and social behavior. The etymological basis of the word psychology points to the *study of the soul* which transitioned into the *study of the mind* and in more recent times has adopted a more behavioral sense (Harper, 2001). The immediate goal of psychology is to achieve a better understanding of groups of individuals and the specific individuals who populate those groups. As such, this present study was intentionally aligned with the overall field of psychology since it seeks a better understanding of the personality preferences of leaders and how those preferences are evidenced in the behavior of the leader.

Appealing to Christian tradition, the *doctrine of man* emerging from the Old Testament writers indicated an interest in and fundamental understanding about the human person as a complex but unified body and soul entity (Robinson, 1911). Different words such as soul, spirit, heart, and mind were used in attempts to explain this complexity but soul was the most basic word meaning a person or living being. Wiredu (2009) enlightened that the "soul, in Western discourse, is indeed supposed to be the life principle of the human system. But it is also conceived as the seat of thought. Descartes speaks of mind and soul interchangeably" (p. 14). The self as an expression of personality marks a person as a soul regardless of social or legal status (Pittenger, 1964). That person is an autonomous moral agent and has an independent relationship with God. This uniqueness springs from the creative act of God in forming man when Adam was energized with the "breath of life and man became a living being" (Gen. 2:7). The breath of life placed man in an exclusive category apart from other creative acts of God. With this breath came the source of wisdom because there was a "spirit in man and the breath of the Almighty gives them understanding" (Prov. 32:7). Mork (1967) noted that "man's vital breath is God's gift; he breathes by courtesy of God's Spirit" (p. 73). Included in this godly breath was a functioning conscience since the "spirit of a man is the lamp of the Lord, searching all the innermost parts

of his being (Prov 20:27). The New Testament echoes the same theme, noting that "for who among men knows the thoughts of a man except the spirit of a man, which is in him" (1 Cor 2:11). These words denote the reality of what it means to be human and are of particular interest to the human leader as they attempt to comprehend their own personality.

The Bible is not a psychology textbook and no branch of psychology can be linked directly to biblical insight, but the ancient writers displayed a superior understanding of personhood and the distinctive individuality of each person. The uniqueness of mankind and the profound personality of each person make the parallel study of the Bible and the study of psychology a valuable pursuit. "We must read the Bible or we shall not understand psychology. Our psychology, whole lives, our language and imagery are built upon the Bible" (Jung & Foote, 1976, p. 156). The Bible is a valid source of knowledge in understanding human nature and personality development (Bassett, Mathewson, & Gailitis, 1993; Edinger, 1986).

Embedded in psychological research is the study of personality (Feist, 1994). Personality psychology is "concerned with identifying and applying methods for classifying human characteristics in order to establish a basis for understanding, explaining, and predicting individual differences in attitudes, behavior, and performance" (Francis, Craig, & Robbins, 2007, p. 257). However, there is no general agreement on the definition of personality and any definition is premised on different theoretical perspectives. The word *personality* is derived from the Latin word, *persona*, meaning mask. Actors in ancient Greek and Roman theater played multiple roles and wore different masks depicting the personalities and temperaments of their characters.

Personality deals with the sum total of what it means to be a person. Davis and Palladino (2004) defined personality as "a relatively stable pattern of behaving, feeling, and thinking that distinguishes one person from another" (p. 459). The emphasis in understanding personality is in appreciating the contrasts among individuals. The American Psychological Association defined personality as the "unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (both overt and covert) across different situations

and over time" ("Personality," n.d.). This definition focuses attention on the individual differences in distinguishing patterns of thinking, feeling, and behaving. Ryckman (2004) clarified even further by defining personality as a "dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations" (p. 97). These defining characteristics are the lived out behaviors that are shaped by personal values and attitudes, reactions to other people, problems, and stress. Personality is not just *who* we are relative to personal behavior, but personality is also *how* we are in relationship to self and others (Franklin, 2010). Defining a personality characteristic as a personality trait, Jackson, Hill, and Roberts (2012) defined *personality traits* as "neuro-physiological structures that cause relatively enduring, automatic patterns of thoughts, feelings, and behaviors that tend to manifest in certain ways under certain circumstances" (p. 2).

The branch of psychology known as personality psychology is concerned with efforts to describe and comprehend persons including their individual differences. Hogan (1998) succinctly stated that "personality psychology concerns analyzing the nature of human nature" (p. 88). It focuses on individual differences or the uniqueness of individuals, as well as investigating human nature or how people are similar. It does this by looking at the psychological processes of the person. More narrowly defined, "personality psychology is the study of the individual differences in traits, motives, abilities, and life stories that make each individual unique" (Roberts et al., 2006, p. 322).

Idiographic Psychology

Allport (1937) was one of the first psychologists to pay special attention to the study of personality. His efforts led him to different conclusions than Jung. While Jung (1963) had a strong focus on human unconsciousness coupled with primal archetypes, as well as distinctly differentiated personality types, Allport emphasized conscious motivations and present situations coupled with a trait theory of personality. Allport formulated two primary ways to study personality: nomothetic and idiographic. Nomothetic psychology searches for general laws that

are applicable to different groups of people whereas idiographic psychology attempts to understand the uniqueness of a particular person.

Luthans and Davis (1982) identified an *idiographic focus* as an "intensive study of single cases in naturally occurring situations. The term idiographic refers to individual-centered, natural environment context research, or the case study, as opposed to the nomothetic approach, which is group-centered, standardized, and takes place in a controlled environment" (p. 380). Specifically, the choice of an idiographic method for use in leadership studies demonstrates its power to "directly observe leader behavior and its effects in a natural setting" (Davis & Luthans, 1982, p. 237). More recently, a number of studies were conducted investigating career assessment considerations and characterized as either idiographic or nomothetic with some studies blending both approaches (Diemer & Gore, 2009). There are environmental considerations in selecting appropriate research methods as summarized by Roberts et al. (2006) in concluding that it is "clear from our review that the field of personality psychology is intrinsically a multi-method field" (p. 334). More recently, an idiographic approach was used to extend personality theory into the leadership domain by suggesting a "new construct labeled leadership coherence, which refers to the notion that a leader's behavior fluctuates in a consistent, reliable, and predictable idiographic manner across situations" (Michel & LeBreton, 2011, p. 688). Although there was no effort to correlate this work with a typology of personality, there was a focus on the essential importance of the leader as an individual person.

In conclusion, this present study is semi-idiographic in nature, looking at the distinctive personality type of a leader in a noncase study approach and how that type designation has a bearing on leadership behaviors. The notion of individual uniqueness or corporate universality has divided personality theorists over time as a fundamental assumption. A mixed or blended methods approach offers opportunities for ongoing discovery in the future.

Jungian Analytical Psychology

Carl Jung (1875-1961) was the only son of a Swiss Reformed Church evangelical minister. He had eight uncles in the clergy and his maternal grandfather was a clergyman who introduced a nonconventional mystic spiritualist influence into the family. His childhood was marked by an eclectic and dissimilar set of influences. With a formative background in medical studies, Jung became a renowned psychologist and psychiatrist and is credited as the founder of analytical psychology. His major contributions included the idea of the collective unconscious and archetypes, as well as the classification of psychological types into distinct categories. The goal of Jungian psychology was the exploration of both the conscious and unconscious elements of the psyche on the journey to becoming a whole person in a process Jung termed *individuation* or the attainment of self. With this in mind, he saw the human soul as requiring intentional nurturing and development beyond just mind and body. Jung distinctively sought after an integration of unconscious energies and forces with the measurable evidence of conscious behavior. He recognized the psyche as mind, but acknowledged the mystery of the soul via his own spiritual experiences.

Although a compatriot and contemporary of Freud, Jung did not agree with Freud regarding the nature and significance of the unconscious mind (E. Taylor, 1998). Both Freud and Jung accepted the idea of a subconscious regarding dream interpretation, but Jung purposed a better understanding of the unconscious as a way to achieve individual self-awareness on the path to becoming a whole person, while Freud considered the unconscious as an archive for all repressed sexual desires that ultimately led to physical or mental illness. Freud purposed to expose the unconscious as a way to recover from illness, making Jung's analytical psychology distinct from Freudian psychoanalysis. Jung and Freud both looked at observations from individual patients and drew different conclusions (Snowden, 2006).

Another telling difference between Freud and Jung was their belief concerning religion. Freud considered religion as a fallacy and put his faith in the ability of the mind to access unconscious thought. Jung considered religion as a

place of wellbeing or a starting point towards wholeness in exploring all elements of the self. He championed spirituality outside of religion believing that God spoke primarily through dreams and vision. Jung went on in life to devote himself to investigating the mysterious depths of the human unconscious as the basis for understanding the individual. Unlike his contemporaries, Jung distinctively sought after an integration of psychology with spiritual experience as he examined the nature of the human condition.

Archetypes and Application to Leadership Studies

Jung perceived that the human psyche had conscious and unconscious components and that the unconscious part had both personal and collective elements. Jung postulated that there was an unconscious element in society at large known as the *collective unconscious* that manifested itself as instinctual patterns of conscious behavior. This idea was birthed in Jung while he was reflecting on a personal childhood memory. Jung (1963) explained that "along with this recollection there came to me for the first time, the conviction that there are archaic psychic components which have entered the individual psyche without any direct line of tradition" (p. 23). More specifically, Jung postulated that "in addition to our immediate consciousness, which is of thoroughly personal nature which we believe the only empirical psyche, there exists a second psychic system of a collective, universal, and impersonal nature which is identical in all individuals" (Jung, 1953). Thus, the definition of an *archetype*.

The archetype is a crucial Jungian concept. These so-called universal patterns or archetypes are common to all persons and act as the foundation on which each individual uniquely fashions their own life experiences. Aristotle initially defined an archetype as an original form or timeless universal from which derivatives could be identified as a way of better understanding. Tarnas (2009) defined an archetype "as a universal principle or force that affects—impels, structures, permeates—the human psyche and the world of human experience on many levels" (p. 27). Archetypes serve as an unconscious framework established over millennia of time as an underlying set of hardwired tendencies for certain behaviors. Jung (1983) clarified that "I have often been asked where the archetypes

or primordial images come from. It seems to me that their origin can only be explained by assuming them to be deposits of the constantly repeated experiences of humanity" (p. 70).

An archetype can be thought of as an inborn pattern of thought derived from the collective experience of the past and present in the individual unconscious. In this sense, it is the individual who carries the essence of culture and it behooves the person of the leader to fully understand themselves and the kind of culture that they bear from environment to environment and more broadly from generation to generation. Jung (1958) suggested that the final objective of the collective unconscious and personal individuation was to attain life's highest experience which is essentially a spiritual pursuit.

Jung identified four archetypes that Abramson (2007) suggested had a connection with leadership theory; the archetypes of child, hero, mother, and father. Abramson went further and, using the biblical account of Abraham, posited that "archetypal psychology suggests the possibility of a leadership archetype representing the unconscious preferences of human beings as a species about the appropriate relationships between leaders and followers" (Abramson, 2007, p. 115). Specifically, Abramson proposed that "parallels between the behavior of God as leader in the Abraham myth and the recommendations of modern leadership theory demonstrate a continuity that represents an archetypal pattern of leadership behavior" (p. 121). Abramson concluded from the biblical account of Abraham that:

> God exhibits a more ethical and humanitarian leadership style than generally found in the recommendations of leadership theory. As an archetype, God's behavior suggests that human beings as a species prefer leaders who sincerely care about them and give them as many chances as they need. Leaders should be consistent, reliable and trustworthy in building generally unconditionally supportive relationships with followers. (p. 127)

This profound observation describes much about the function of the leader in servant leadership theory (Patterson, 2003).

The idea of archetypes and the hidden influence of the collective unconscious are not without their detractors. Just as Freud (Snowden, 2006) and

Jung (1963) looked at the same information and came away with different conclusions about the subconscious, Neher (1996) looked at Jung's writings and examples and came away with different conclusions summarizing that Jung "prematurely dismissed the role of personal experience on the one hand, and universal cultural experience on the other" (p. 80). It seems there is no consensus in the always emerging field of psychological discovery.

Ego, Self-Awareness, and Application to Leadership Studies

Confident of his formulation of universal archetypes and building on the notion of archetypes as the essence of the collective unconscious, Jung (1953) reasoned that personal unconsciousness is made up of a number of complexes defined as "a conglomeration of psychic contents characterized by a peculiar or perhaps painful feeling-tone, something that is usually hidden from sight" (p. 34). More simply stated, a complex is an emotion-filled, often troubling theme that emerges from and is tied together by the conscious experiences of a person's life. Complexes are due to a person's unique life experiences and part of their personal unconscious according to Jung. One of the many complexes in the personal unconscious is the *ego* which Jung defined as "a complex of ideas which constitutes the centre [*sic*] of my field of consciousness and appears to possess a high degree of continuity and identity. Hence I also speak of an ego-complex" (Jung, 1983, p. 425). The ego is the seat of consciousness or the characteristic of the mind that pertains specifically to a person when they say *I* or *me*. Jung considered the ego as the way an individual makes sense of their environment but was also convinced that a person had an archetypical unconscious predisposition to view the world in a certain way.

The self-aware contemporary leader is faced with the task of understanding all the facets of their conscious and unconscious parts on the life long journey to attain wholeness or individuation as a person. Self-awareness is first a marker of unconscious innate personhood (Warren, 1997), but consciously self-awareness theory perceives a causal link between a leader understanding their internal beliefs, values, and assumptions and resultant personality-driven behavior (Duval & Wicklund, 1972; Silvia & Duval, 2001). Appealing to self-awareness, Bennis (2003)

emphasized that "leaders are made, not born, and made more by themselves than by any external means" (p. xxix). Jung (1983) highlighted the importance of conscious self-awareness for leaders in training the personality pointing out that:

> It is not the child, but only the adult, who can achieve personality as the result of a full life directed to this end. The achievement of personality means nothing less than the optimum development of the whole individual human being. . . . Personality is the supreme realization of the innate idiosyncrasy of a living being. It is an act of high courage flung in the face of life. (p. 195)

Training or developing the personality is an intentional task driven by causal necessity because "without necessity nothing budges, the human personality least of all" (Jung, 1983, p. 197).

Regarding the behavioral role of leaders, more than 40 years ago Maslow (1965) suggested that the "best managers increase the health of the workers whom they manage" (p. 75) and, in summarizing the work of Likert, found that "psychologically healthier people make better managers" (Schott, 1992, p. 114). This implicit call to self-awareness and leadership development is found in the self-actualization work of Maslow and in Jung's (1983) use of the "term individuation to denote the process by which a person becomes a psychological 'in-dividual,' that is, a separate, indivisible unity or whole" (p. 212). Bridging the divide between Maslow and Jung, Schott argued that "certain personality types may be more receptive to the process of self-actualization than others . . . that is, certain persons may be more predisposed than others to undertake the journey of individuation" (p. 116). The process of individuation is about becoming a complete individual. C. Rogers (1961) suggested that "becoming a person means that the individual moves toward being, knowing and accepting, the process which he inwardly and actually is . . . [and] is increasingly listening to the deepest recesses of his psychological and emotional being" (p. 176). Jungian type theory, which is the subject of the next section, provides possible insights into why certain leaders are able to master leadership processes better than others.

Jungian Personality Type Theory

In addition to Jung's (1963) groundbreaking work regarding archetypes, he was recognized for his formulation of a theory of personality type which ultimately became the basis for the MBTI®.

Explanation of Jung's Attitudes and Functions

Jung's typology of personality was a major contribution to personality theory second only to his detection and study of archetypes (Brawer & Spiegelman, 1964). Encouraged by the contribution of prior personality theorists, Jung (1921) was not the first to seek a classification of personality types. The categorization of personality types was a keen interest of noted historical figures dating back to Hippocrates, the ancient Greek physician, who first postulated a four factor theory of temperament in 400 BC. Other thinkers including Galen, a 2nd-century Greek physician, referred to a model of four temperaments in his writings. Allport (1937) continued the quest to formulate a classification of personality and, more recently, Wundt, the father of modern experimental psychology, sought to refine a multifactor classification of human personality (Lester, 1990; Merenda, 1987). Speaking to the notion of classification as differentiation, Keirsey (1998) proffered that "I have long believed that personality, like anatomy, comes about not by an integration of elements, but by differentiation within an already integrated whole, emerging gradually as an individuated configuration" (p. 31). The most recent attempt at a robust pattern of personality classification defined a five-factor model (Dingman, 1990; McCrae & Costa, 1999). Work continues to identify that elusive model of personality that universally fits mankind in all its multidimensional diversity. Jung fit well into this cadre of revolutionary and evolutionary thinkers as the founder of analytical psychology.

Jung's (1921) study of the ego led to his formulation of psychological types that classified people into distinct groups according to their particular personality preferences. "Jung suggested that much of the seemingly random variation in human behavior, performance, and attitude is attributable to basic differences in the [way people] prefer to employ their mental processes" (Francis et al., 2007, p. 258). Given a particular situation, individuals gravitate in the direction of their well-

established personality preference. Note that personality type classification is a dichotomous division and is distinctly different from personality trait theory that explains, "Personality assessment in terms of continuous scale scores, assigning individuals to specific points along a finite number of continua" (Francis et al., 2007, p. 258). Type theory asks *what kind* whereas trait theory asks *how much*.

Jung (1921) was convinced through his work with various individuals and patients that humanity could be divided into two major personality types that he termed extraverted and introverted. He suggested that the whole person or *psyche* is represented by a conscious part plus an unconscious part. Jung divided psychic energy into two basic general attitude types that he termed extraverted and introverted. The etymology of these terms is from the Latin words *extra* meaning outside, *intro* meaning inside, and *vertere* meaning to turn. Jung described these two general attitude types as "distinguished by the direction of general interest or libido [psychic energy] movement . . . differentiated by their particular attitude to the object" (p. 67). In other words, the extravert is typified by psychic energy directed out of the person to the external world while the psychic energy of the introvert is directed inwardly (Zeissert, 2006). These two innate differences in personality cause individuals to perceive and respond to life in different ways. As used by Jung, the word *attitude* described a deeper more established manner of behavior than the way the word is currently used in the modern English language. "Introversion or extraversion, as the typical attitude, means an essential bias which conditions the whole psychic process, establishes the habitual mode of reaction, and thus determines not only the style of behavior but also the quality of subjective experience" (Jung, 1921, p. 134). Jung would advocate that all persons, including the person of the leader, can be fundamentally categorized as either extraverted or introverted and that particular characterization fundamentally drives all human behavior.

Jung (1983) defined a *personality type* as a "habitual attitude in which one mechanism predominates permanently, although the other can never be completely suppressed since it is an integral part of the psychic economy" (p. 132). Note that Jung did not categorically place individuals into a framework or pure type at the

exclusion of the other. "But everyone possesses both mechanisms, extraversion as well as introversion, and only the relative predominance of one or the other determines the type" (Jung, 1983, p. 130). In this sense, the two attitudes of extraversion and introversion are revealed in observable behaviors or strong personality preferences. However, the dominant attitude operates in the conscious realm and the other is reflected in the unconscious. Jung described extraversion as:

> characterized by interest in the external object, responsiveness, and ready acceptance of external happenings, a desire to influence and be influenced by events, a need to join in and get "with it," the capacity to endure bustle and noise of every kind, and actually find them enjoyable, constant attention to the surrounding world . . . [so as] the extravert's philosophy of life and his ethics are as a rule of a highly collective nature with a strong streak of altruism. (pp. 140-141)

Note that the extravert has a preference for *altruism* which is a foundational element of servant leadership. Extraversion is marked by the desire for a person to affect a situation rather than be affected by a situation. The extravert possesses an introverted attitude but it operates in the unconscious.

The opposing dichotomous attitude of introversion was described by Jung (1983) as:

> not forthcoming . . . who holds aloof from external happenings, does not join in . . . has no love of enthusiastic get-togethers . . . barricading himself against influences from outside . . . often suffers from inferiority feelings. . . [so that] for him self-communings [*sic*] are a pleasure . . . his best work is done with his own resources, on his own initiative, and in his own way . . . where alone it is possible for him to make his own contribution to the life of the community. (pp. 141-143)

Introversion is marked by the desire to understand how a person is affected by a situation rather than to affect a situation. The introvert possesses an extraverted attitude but it operates in the unconscious.

These two attitudes define the direction or flow of psychic energy within an individual. The essential idea is that there is "in one case an outward movement of interest towards the object, and in the other a movement of interest away from the object to the subject [or person] and his own psychological processes" (Jung, 1983,

p. 131). As a result, individuals are primarily inclined to comprehend everything in life according to their extraverted or introverted attitude.

Recognizing that there were many personality differences among the group of individuals characterized as either extraverts or introverts, Jung (1983) went on to identify two opposing pairs or four basic *functions* asserting that one of these four functions was a type or predominant in an individual. The four functions were *sensing* and *intuition* as one pair and *thinking* and *feeling* as the other pair. Jung described the "essential function of sensation [or sensing] is to establish that something exists, thinking tells us what it means, feeling what its value is, and intuition surmises whence it comes and whither it goes" (p. 144). Jung referred to the thinking/feeling functions as rational and the sensation/intuition pair as nonrational. Each of these functions could be either extraverted or introverted. Therefore, there were eight possible type combinations identified by Jung. These four functions perhaps echo back to the Greek four factor theory of temperament and other four part systems of temperament.

Explanation of the MBTI® Personality Code

Jung's theory of a typology of personality was published in German and shortly thereafter translated into English. It was read in 1923 by Katharine Briggs who immediately accepted Jung's premises regarding human behavior. She continued her observations of people's behavior but changed her perspective and began using the primary lens of psychological type. When the U.S. entered World War II, Katharine's daughter, Isabel Myers, recognized a need to help people understand each other better and thereby minimize conflict in working together to support the war effort. Isabel and Katharine teamed up and in 1941 set out to develop a personality assessment instrument based on Jung's personality typology. The first MBTI® was copyrighted in 1942 and over the next 25-30 years was developed and improved several times to establish construct reliability and validity.

Myers and Briggs formulation of the MBTI® did not adhere exactly to Jungian type theory. First, Jung placed significant emphasis on the attitude of extraversion/introversion and then explained the array of differences within this primary attitude using two pairs of opposing functions. The MBTI® places the

extraversion/introversion dichotomy on the same level of importance as the four functions. Second, the MBTI® introduced a construct termed *perceiving/judging* that was not fully delineated in Jung's original type theory. Perceiving is the way the mind receives information and judging is the way decisions are made regarding that information. Perception was named to identify the intuition/sensing function pair and judgment was named to identify the feeling/thinking function pair. Myers (1980) explained that she and her mother "waited a long time for someone to devise an instrument that would reflect not only one's preference for extraversion or introversion, but one's preferred kind of perception and judgement [*sic*] as well" (p. 1). With the addition of the perception/judgment type, there was some scholarly criticism since the implication was that more than one scale was being used to measure the same phenomenon (Stricker & Ross, 1963, 1964).

The inclusion of the perceiving/judging dichotomy by Myers and Briggs increased the number of possible MBTI® personality types from Jung's original 8 to 16, completing the structure for practical implementation of a tool for assessing psychological type. While adding value to the personality assessment instrument, it also complicated full comprehension of the four-letter type designation that serves as a formula or shorthand method for informing a person regarding how they theoretically prefer to use their mental functions (see Table 1).

A brief explanation of the four-letter description or hierarchy of functions is helpful at this point using Jungian terminology. The first letter pair (E/I) indicates a natural first preference for extraversion or introversion or the direction psychic energy flows within the person. The last letter pair (J/P) defines the orientation of the personality to the outer world. The J/P scale designates the dominant function for extraverts and the auxiliary function for introverts.

The second and third letter pairs (S/N and T/F) identify the mental processes that guide the extraverted or introverted personality. The dominant function is the most highly developed function and lived out either in an extraverted or introverted manner providing primary direction to life. Jung (1983) explained that the dominant or "superior function is the most conscious one and completely under conscious control, whereas the [other] less differentiated

functions are in part unconscious and far less under the control of consciousness" (p. 340). The dominant function is the default function and used more consistently than the other three functions that are partially unconscious. The fourth or remaining letter identifies the auxiliary or supporting function used the most after the dominant function. It is in the opposite pairing from the dominant function. To complete the explanation, the tertiary function does not appear in the four-letter code and is opposite the auxiliary function on the same dichotomy. It is used in either the same or the opposite attitude (i.e., extraverted or introverted) in support of the dominant function. The inferior or final function does not appear in the four-letter code, is opposite the dominant function on the same dichotomy, and is in the opposite attitude of the dominant function. The term inferior is used in the sense that it is the least developed of the four mental functions. An inferior function is one that "lags behind in the process of differentiation . . . [and its] true significance nevertheless remains unrecognized. It behaves like many repressed or insufficiently appreciated contents, which are partly conscious and partly unconscious" (Jung, 1983, p. 376). In other words; an inferior function is not a preferred way of behavior and is more difficult to develop but still aligns with an overall typology of personality. From this rather brief explanation, it is intuitively obvious that a leader's factual knowledge of just their MBTI® personality designation is inadequate without understanding the full meaning of it and then working at developing a fuller personality based on that understanding. This journey of self-awareness is a life long journey for the leader.

Table 1: Sixteen Personality Preference Types Based on the MBTI® Four Letter Descriptors

Extraversion/ introversion	Sensing/ intuition	Thinking/ feeling	Judging/ perceiving	MBTI® code
E	S	T	J	ESTJ
E	S	T	P	ESTP
E	S	F	J	ESFJ
E	S	F	P	ESFP
E	N	T	J	ENTJ
E	N	T	P	ENTP
E	N	F	J	ENFJ
E	N	F	P	ENFP
I	S	T	J	ISTJ
I	S	T	P	ISTP
I	S	F	J	ISFJ
I	S	F	P	ISFP
I	N	T	J	INTJ
I	N	T	P	INTP
I	N	F	J	INFJ
I	N	F	P	INFP

Explanation of the MBTI® Mental Functions

Also at this point, a brief explanation or description of Jung's four mental functions with the extension made by Myers and Briggs would be helpful. Using Jungian terminology, the major distinction in personality is the extravert/introvert dyad. The basic attitude or extraversion/introversion pair can be summarized as whether a person is more energized by interests in the world beyond self that involves people and objects or whether a person is more energized by interests in

their internal environment such as reflecting on their own inner world. Beyond that, one of the four functions is dominant, most differentiated, or superior to the others.

The second complementary pair, sensing/intuition, is concerned with how individuals "prefer to take in information" (Myers, 1980, p. 8). Information can be received and dealt with by either focusing on facts and details using the function of sensing or by considering broader options and possibilities using the function of intuition. Sensing is focused on the realities of a situation using information obtained directly through the five senses. Conversely, intuition is focused on more indirect means for obtaining information, working through the unconscious to infer meanings that go well beyond information obtained directly through the senses.

The third opposing pair, thinking/feeling, is concerned with how individuals "prefer to make decisions" (Myers, 1980, p. 8) based on the information they have received. Decisions can be made based on objective logical principles using the function of thinking or by considering subjective human values using the function of feeling. Thinking is focused on analytic reasoning and intellectual logic to make decisions and reach conclusions. Conversely, feeling is focused on decision making while being sensitive toward personal implications and subjective estimations.

The fourth opposing pair, perception/judgment, was added by Myers and Briggs as a means of assessing functional dominance and providing a deeper level of sensitivity into comprehending a typology of personality. Perception labels the sensing/intuition pair and judgment labels the thinking/feeling pair. Myers (1980) explains that:

> Perceiving is here understood to include the processes of becoming aware of things, people, occurrences and ideas. Judgement [*sic*] includes the processes of coming to conclusions about what has been perceived. Together, perception and judgement [*sic*] make up a large portion of a person's total mental activity. They govern much of their outer behavior, because perception by definition determines what people see in a situation and their judgement [*sic*] determines what they decide to do about it. (p. 1)

The outcome of the differences in perception and judgment is revealed in differences in behavior as a part of engaging with the outer world. The significance of the perception/judgment dichotomy is to identify which two of the four functions

are dominant and which two of the four are auxiliary per the Jungian terminology for a particular personality.

It should be noted that *individuation* or attainment of the whole person was the goal of Jung (1958) and he set it as the lofty goal of persons interested in the life-long process of intentional growth and psychological self-awareness. Helps are necessary in both understanding the often mystic thoughts of Jung as well as accomplishing the progression towards individuation. Tuby (1987) noted, "It has always seemed to me that the Bible offers the richest and most profound validation of the life work of Jung: the uncovering and the elaboration of the process he called individuation" (p. 389). This observation again draws a connection between psychological theory and spiritual understanding that is essential in the life of the leader. Jung's typology, as operationalized by Myers and Briggs, was part of an overall attempt to assist individuals in understanding themselves and appreciating the differences between themselves and others.

In addition, there is a biblical basis in the writings of the Apostle Paul for personality type theory saying:

> For just as we have many members in one body and all the members do not have the same function, so we, who are many, are one body in Christ, and individually members one of another. Since we have gifts that differ according to the grace given to us, each of us is to exercise them accordingly: if prophecy, according to the proportion of his faith; if service, in his serving; or he who teaches, in his teaching; or he who exhorts, in his exhortation; he who gives, with liberality; he who leads, with diligence; he who shows mercy, with cheerfulness. (Rom 12:4-8)

Additionally, the Apostle Paul wrote:

> And he gave some as apostles, and some as prophets, and some as evangelists, and some as pastors and teachers, for the equipping of the saints for the work of service, to the building up of the body of Christ; until we all attain to the unity of the faith, and of the knowledge of the Son of God, to a mature man, to the measure of the stature which belongs to the fullness of Christ. (Ephes 4:11-13)

From the perspective of psychological type theory regarding church leadership, these verses can be interpreted as acknowledgement of different gifts that require different aptitudes and ways of functioning that are best exercised by different

personality types. It is not possible to compartmentalize or force fit a person into a definitive psychological type since every person is uniquely distinct from all other persons. The four-letter designation resulting from the MBTI® instrument is a starting point for a life-long process of personality development or, in Jung's (1958) terminology, personal individuation.

Type Theory per MBTI®

Jungian personality type theory was operationalized in the MBTI® as a way of assessing self-reported personality preference.

Development of the MBTI®

It is important to recall that this paper explored the relationship between the Jungian typology of personality as evidenced in the MBTI® and Greenleaf's (1977) philosophy of servant leadership. Lewis et al. (2008) informed that the "basis of Katherine and Isabelle's work was the idea of service, although it is not spelled out. Different types have different gifts to offer in service, but that is not explicit in their writings" (p. 8). Defining leadership as a way of providing service to others, this statement is an inferential link between the development of the MBTI® based in Jung's psychological theory and leadership theory.

Near the beginning of World War II, Myers and Briggs took the theoretical personality type work of Jung and began the journey to develop a set of validated and reliable questions for the purpose of assessing the personality preference or the type of a person. The first version of the MBTI® was published in 1942. Working independently and without the benefit of much formal training, the MBTI® took shape over the next 25-30 years. Development continued as questions were restructured and training materials were prepared to assist in administration of the survey. During the 1950s, several thousand high school students and medical students were sampled in various studies using the MBTI® primarily as a research instrument. Computerized scoring was introduced in 1962. In 1969 a typology lab was established at the University of Florida for the purpose of advancing the state of personality type research. In 1975, the MBTI® was judged as ready for applied use and the Consulting Psychologists Press (CPP) was named as its publisher. The

Association for Psychological Type (APT) was formed in 1979 at the Second International Conference held in Philadelphia, Pennsylvania. Also in 1979, *The Journal of Psychological Type* began publication. Beginning in the 1980s and beyond, use of the MBTI® increased domestically in the U.S. and was extended to the international community with initial use in Japan. The religious community used the MBTI® "increasingly to help individuals appreciate differences in ministry and spiritual life" (McCaulley, 1990, p. 182) beginning in the 1980s (Harbaugh, 1984, 1988). Since this time, the MBTI® has become globally one of the most used personality assessment instruments and usage continues to increase with time.

The MBTI® is a self-report, forced-choice questionnaire with items intended to categorize subjects per the structure of the four-personality preference dichotomies. It is not a test with correct and incorrect responses, it does not compare the results to other individuals or some normal or pathological standard, it is not an assessment of mental health or intelligence, and it does not indicate probability of life success. Rather the instrument was created to determine a given set of dichotomous personality-type preferences but not to assess the proportional strength of those preferences (Myers et al., 2003). The MBTI® has been used for various purposes including self-awareness edification, leadership development, team building, and relationship counseling. It is reported that more than three million people take the MBTI® each year (Gardner & Martinko, 1996; Offermann, & Spiros, 2001) and globally the number is increasing. Lawrence (1996) suggested that the popularity of the assessment process was in part because "it appears simple: 1) it is self-administering; 2) the questions are concerned with everyday events; and 3) scoring is straight forward" (p. 88). These elements enabled the wide spread and ongoing use of the MBTI® in many different research contexts. However, interpreting the results is not easily accomplished and cannot be accomplished "in a one hour or one time orientation" (Lawrence, 1996, p. 94). Self-discovery and development of a full personality are accomplished over a much longer period of time.

Relatively soon after Jung (1921) published his work in German regarding personality types and the release of the MBTI® in the U.S. as a developing research

instrument during the 1950s, there was active research in the pragmatic application of personality type theory (Richek & Bown, 1968). As the MBTI® grew in popularity, scholarly studies were conducted critically assessing it both conceptually and empirically. Some theorists questioned the fundamental notion of a personality typology to identify differences among people (Mendelsohn, Weiss, & Feimer, 1982; Weiss, Mendelsohn, & Feimer, 1982). The subject study accepts Jungian personality type theory and an assumption was made that no amount of data would convince those who do not accept Jung's theory (Kaplan & Saccuzzo, 1997; Wiggins, 1989). Myers (1980) summarized her conviction in the correctness of Jungian type theory saying:

> I have looked at the world from the standpoint of type for more than fifty years and have found the experience constantly rewarding. It can be rewarding for society, too. . . . Whatever the circumstances of your life, whatever your personal ties, work, and responsibilities, the understanding of type can make your perceptions clearer, your judgments sounder, and your life closer to your heart's desire. (pp. 201-202)

Other researchers questioned the incremental validity of the MBTI® scales relative to other personality factor models such as the five factor model (McCrae & Costa, 1989), suggesting that the "MBTI scores simply tap four of the five factors" (Edwards et al., 2002, p. 434). In the Edwards et al. study that focused on the ability of the MBTI® "to predict performance on social cognitive tasks tapping information processing effort" (p. 432), it was found that "our results are broadly consistent with Jung's (1921) speculations about the structure of personality and the embodiment of those speculations in the MBTI, particularly the JP scale" (p. 446).

Additional empirical support for use of the MBTI® comes from Bess, Harvey, and Swartz (2003) who conducted an analytically robust hierarchical confirmatory factor analysis of the instrument, summarizing:

> We find the findings reported above—especially when viewed in the context of previous confirmatory factor analytic research on the MBTI, and meta-analytic reviews of MBTI reliability and validity studies (Harvey, 1996)—to provide a very firm empirical foundation that can be used to justify the use of the MBTI as a personality assessment device in applied organizational settings. (p. 4)

Based on the results of extant research, the MBTI® continues to be widely used with confidence in personality research (Hess & Lanning, 2003) and was used successfully in the present study.

Practical Use of the MBTI®

The MBTI® has been used in many different research environments including leadership development, team formation and effectiveness, and spirituality. Achieving an understanding of one's own personality preferences and the diverse personalities of others leads to development of a fuller personality or individuation in Jungian vocabulary and a better appreciation for the differences in others.

Leadership development and the MBTI®. At this point, it would be profitable to review how the MBTI® has been used in the study of leaders and the function of leadership. The type theory of leadership posits that individuals are differentiated from each other by personality preferences that are demonstrated in certain leadership behaviors. These behavioral preferences are neither right nor wrong; they are just different from each other.

Research in the area of leadership has shown that the behavior of leaders is an important field of study (Bass, 1990; Skinner & Spurgeon, 2005; A. B. Tucker & Russell, 2004) and personality characteristics influence behavior (Kornor & Nordvik, 2004). Jungian type theory, apart from the MBTI®, has been useful in this research suggesting that "personality types have an effect on the types of leader behaviors that an individual believes to be appropriate" (Thomson & Gopalan, 2005, p. 61). In addition, Jungian psychology has been used to explore the trust relationship between leaders and followers in the matter of corporate social responsibility suggesting that "trust in leaders depends on the relationship between the leader's values, words, and actions" (Ketola, 2006, p. 6). It was found that "mild cases of leadership reliability inconsistency involve only an incomplete individualization process of the leaders in question" (p. 11). In other words, leadership development was a life-long process termed individuation in Jungian vocabulary and is never really complete. Ketola summarized, saying, "It is more important to be coherent than visionary. It is useless for leaders to dream about the

future, if no one trusts them. Hence the advice for leaders is: be consistent first and only then visionary" (p. 12). Self-awareness of personality preference is an essential part of leadership development and the practice of servant leadership. Leadership development goes beyond knowledge of self or self-awareness to encompass relationship with other individuals in a more inclusive appreciation for human behavior (Allgood, Bray, Foti, & Thompson, 2012; Cernic & Longmire, 1987).

As a practical extension of Jungian type theory, the MBTI® has been an important instrument in leadership research and leadership development beginning as early as the 1970s (Mitroff & Kilmann, 1975; Pandey, 1976; Walck, 1997). Organizations adopted it as a resource to aid in leadership training and career planning (Barr & Barr, 1989; Hirsh, 1985). The use of the MBTI® continues, and Watland (2009) argued that leadership development is a "process that begins from the inside out . . . [and] through the lens of the MBTI, aspiring leaders may gain an opportunity to assess themselves and reflect on how their preferences may affect their leadership approaches" (p. 1). Specifically, the servant leader benefits from introspective self-awareness that enables a more holistic perspective of their leadership behaviors. Greenleaf (1977) noted that "awareness is not a giver of solace—it is just the opposite. It is a disturber and an awakener. Able leaders are usually sharply awake and reasonably disturbed. They are not seekers after solace" (p. 41).

Sieff (2009) investigated the relationship between personality type and leadership focus, arguing that "a central element of any executive leadership development programme [*sic*] is the improvement of self-knowledge . . . (and) self-awareness and self-management are important attributes for leadership success" (p. 63). Leadership focus is defined as the ability to pay close attention to the various areas requiring the attention of the leader (Sieff & Carstens, 2006). Understanding personality preference via the MBTI® was premised as a primary way to increase self-awareness, self-leadership, and personal effectiveness (Houghton, Bonham, Neck, & Singh, 2004; Klagge, 1996).

Using the MBTI® to investigate specific personality characteristics, Isaksen and Lauer (2003) explored the relationship between personality type and *cognitive style*, which is defined as how a person approaches the leadership tasks of problem solving and creativity finding that "there does seem to be some conceptual overlap between measures of psychological type and cognitive style" (p. 352). Opt and Loffredo (2003) examined how leaders communicate with others finding that "individuals who prefer extraversion tend to have a more positive communicator image than those who prefer introversion" (p. 560).

Bullis (2009) looked at military leadership differentiating between direct or operational leaders and other higher-level organizational leaders presenting the case that "effective strategic leadership requires behaviors aligned with the Intuitive, Feeling, and Perceiving (NFP) preferences rather than the Sensing, Thinking, and Judging (STJ) preferences prevalent in leaders at the lower levels of organizations" (p. 32). As a result, leadership development is important at different levels in the organization. Either the same leader can be trained to demonstrate different skills or the baton of leadership can be passed to another person if requisite skills are opposite their preferred personality type. Although Bullis did not specifically mention servant leadership, there is an appeal throughout his article that a leader's awareness of their own type preference is influential in achieving group effectiveness "with the overarching objective of harnessing the unique contributions of each member" (p. 40) using personality type distinctions. However, Bullis cautioned against using the MBTI® to select leaders, indicating that "it is clear that measured preferences do not dictate behavior" (p. 32). This advice is not only limited to a single author but echoed by Morgeson et al. (2007).

Leaders are involved in the organizational decision-making process. Including a purposeful blend of personality types in executive decision making offers potential competitive advantage for astute organizations (Fisher & Nelson, 1996; Ones, Dilchert, Viswesvaran, & Judge, 2007). More recently, A. R. Tucker (2011) investigated preparedness for leadership with MBTI® results, finding that the "subjects faced a significant number of challenges in relation to their preparedness for promotion" (p. 296). These preference scores could serve as the

basis for individualized leadership development or mentoring. It can be argued that "developing leaders should be the predominant strategy in organizations that wish to excel . . . and development of leaders at every level becomes the priority of any organization that depends on achieving a competitive advantage for long-term success" (Bullis, 2009, p. 32).

However, there is not total consensus on the application of the MBTI® in leadership development programs. James (2003) pointed out:

> To improve the administration and interpretation of the MBTI in leadership development users of the MBTI are advised to make careful assessments of type when raw scores are "slight" for any dimension, analyze how organizations as "strong situations" can overcome the predicted behavior of type, and consider the potential interaction of needs with type and its potential impact on managerial behavior. (p.68)

James also suggested the use of alternate or different personality assessment instruments so that a person achieves a more complete understanding of themselves on the path to improved self-awareness. In summary, James acknowledged that the "MBTI definitely has a place in leadership development programs if used with caution" (p. 79).

Team effectiveness and the MBTI®. The MBTI® has been used to study team formation and the effectiveness of teaming arrangements. Effective teams coupled with well-developed professional competences provide competitive advantage for organizations. When team members understand their own personality type and the personality preferences of others, they have a better appreciation for the organization (Owens, 1995). Bradley and Hebert (1997) found that better team performance was achieved with a balance of MBTI® types working together. Culp and Smith (2001) suggested that when a team fails "problems are often blamed on 'poor communications,' an overly broad label for a range of personality differences that can create tensions and misunderstandings" (p. 24). Note that failure is attributed to the team as a whole rather than to leadership of the team in particular. Teams often do not achieve promised gains and effectiveness can be improved via consideration of the personality types of the team members (Varvel, Adams, & Pridie, 2003). Suman (2009) reported that use of the MBTI® in conjunction with

other personality assessment instruments was constructive in improving managerial decision making and concluded that the value of using several instruments in parallel was in the "clear understanding of the causes of the existing ineffectiveness" (p. 84). This statement implicitly suggests that although the MBTI® may be popular, it is not the only personality assessment instrument available to researchers.

Spiritual considerations and the MBTI®. The personality of religious professionals has been the subject of conjecture for more than 40 years (Dittes, 1971). Over the years (Oswald & Kroeger, 1988) and more recently, the study of the psychology of religion and psychological type theory have achieved increasing academic recognition (Craig, Horsfall, & Francis, 2005; Francis, 2006; Kay, Francis, & Craig, 2008). Theoretical psychological type theory applied as a practical description of personality differences has been extended into the spiritual realm (Francis, 2005). A robust reading of Genesis 1:27 that describes how God created mankind as male and female found that "psychological type theory has been rediscovered as a theological theory, integrated within a broader conceptualisation [*sic*] of a theology of individual differences" (Kay, Francis, & Robbins, 2011, p. 307). Expanding on this notion, Kay et al. found:

> [A full] understanding of human psychological type as a God-given feature of our lives can be placed alongside our understanding of the working of the Holy Spirit within the life of a believer in the context of the church. We can begin to construct a model of Christian functioning that centres [*sic*] on the interaction between the Holy Spirit and the psychological type of the believer. (p. 307)

The psychology of religion is concerned with both the conscious and unconscious parts of the human psyche.

Interestingly, there has been research using type theory in attempts to discern the MBTI® identity of Jesus Christ, an acknowledged global spiritual leader. This research was rooted in the "realization that the historical Jesus must be a psychological Jesus" (Childs, 2002, p.459). The human Jesus was "viewed as having an inner psychological development like the rest of us" (Childs, 2002, p. 460) as part of a Jewish 1st-century culture. A more in-depth analysis was

conducted by Howell (2004) that "found perceptions of Jesus' personality to be clear and well-defined in the areas of Extraversion and Feeling . . . [and] the perception of Jesus as a Judger or a Perceiver was related to the level of importance participants placed on modeling their lives after that of Jesus" (p. 57).

The MBTI® has long been used in the practical implementation of Christian ministry that acknowledges both the personality of the leader or preacher and the personalities of the people being ministered to in the community. Stiefel (1992) used the MBTI® "to identify the attitudes and functions of personality that affect a preacher's preferred, natural style. Deepened self-awareness allows the preacher to modify his or her style according to the congregational circumstances" (p. 175). There is value for the leader in first understanding self before there is a better appreciation of others. To assist in this process, a method of biblical hermeneutics and liturgical preaching was developed known as SIFT. The acronym is based on the Jungian four-key functions of sensing (S), intuition (I), feeling (F), and thinking (T). Personality awareness is at the heart of the SIFT model. Francis and Robbins (2002) considered the psychological types of male evangelical church leaders, finding that the "two personality types of ESFJ and ISFJ may be particularly prevalent among church leaders in England and Wales" (p. 219). However, in another study that involved both genders in the same locale, Francis and Robbins found that "both male and female clergy revealed preferences for introversion over extraversion, intuition over sensing, feeling over thinking, and judging over perceiving" (p. 266). Studies have also been conducted in the U.S. (Francis, Robbins, & Wulff, 2011) indicating that local congregations have different profiles from the populations of which they are a subset and that clergy may have different profiles from their congregations.

Francis and Jones (2011) found that regarding the reading of spiritually formative material that "individuals' preferred psychological functions shape how different readers read the text in different ways, and how different readers perceive the revelation of God through the lens of their dominant type preferences" (p. 3). However, recalling the cautionary note regarding use of the MBTI® for leadership

development, there is also a strong cautionary note regarding its use for spiritual sense making.

In summary, the preceding section concerning how the MBTI® has been used in the study of personality types regarding leadership development, team environments, and religious leaders, provides support for this paper that explores the personality preference of leaders and the resultant servant leadership behaviors of vision, empowerment, and service. The next sections of Chapter 2 move from a focus on psychology to a focus on leadership providing a basic understanding of leadership theory with an emphasis on servant leadership.

Participative Leadership Theory

Lewin (1936) developed a simple heuristic describing the relationship between behavior, the person, and his or her environment. He proposed that behavior is a function of the person coupled with environmental or situational conditions: Behavior = *f* (person, environment). Both the person and the environment are important in understanding behavior. The personality of the person is a variable in assessing the actions of a leader. *Leadership*, defined as the function of a leader, is an often used word with many diverse definitions. Stogdill (1974) observed that "there are almost as many definitions of leadership as there are persons who have attempted to define the concept" (p. 259). Since Stogdill, many other definitions have evolved and an integrative definition of leadership took shape considering 90 different variables (Winston & Patterson, 2006).

From a psychological perspective, three primary decision-making process climates of leadership were identified as authoritarian, participative, and delegative (Lewin, Llippit, & White, 1939). Authoritarian personalities command absolute obedience or strict submission to their independently made decisions. Participative or democratic leadership "involves the use of various decision procedures that allow other people some influence over the leader's decisions" (Yukl, 2006, p. 82). Delegative or laissez-faire leadership involves little guidance from the leader and allows group members to make their own independent decisions.

Servant leadership is a participative form of leadership (McMahon, 1976). "Other terms commonly used to refer to participative leadership include consultation, joint decision making, power sharing, decentralization, empowerment, and democratic management" (Yukl, 2006, p. 82). Servant leaders are in relationship with others and the behavior of servant leaders influences those relationships. Ismail, Zainuddin, and Ibrahim (2010) found that the "relationship between organizational commitment and relationship oriented leadership behaviour [*sic*] elements (i.e., participative and consultative) is positively and significantly correlated with job satisfaction" (p. 11).

The present paper aligns with the above perspectives and specifically with the definitions of Laub (2004), who characterized a leader as a "person who sees a vision, takes action toward the vision, and mobilizes others to become partners in pursuing change" (p. 4) and leadership as an "intentional change process through which leaders and followers, joined by a shared purpose, initiate action to pursue a common vision" (p. 5). In addition, Laub (1999) defined servant leadership as "an understanding and practice of leadership that places the good of those led over the self-interest of the leader" (p. 81). In these definitions, the leader is proactive and the initiator of relationship with others.

Influence and Actor Specific Theory

Leadership is the exercise of personal influence that is intended to make a difference in various size groups and society at large. Individual leaders play important roles in groups of any size and between nations involving international relationships. Actor specific theory was formulated to investigate how individual decision makers influence large political groups (Hudson, 2005). The theory is rooted in the decision-making process per Snyder, Bruck, and Sapin (1954) explaining that:

> By emphasizing decision making as a central focus, we have provided a way of organizing the determinants of action around those officials who act for the political society. Decision-makers are viewed as operating in dual aspect settings so that apparently unrelated internal and external factors become related in the actions of the decision-makers. (p. 85)

Leaders lead using a style that is personality driven. Appealing to a participative style such as servant leadership, Katz and Kahn (1978) suggested that relationships create bases of incremental influence that are essential for value added leadership.

According to influence theory, effective leadership occurs when leaders develop mature relationships with others and benefit from those relationships (Graen & Uhl-Bien, 1991). A. L. George (2003) instructed that influence theory even includes the times when consideration should be "given to the role of reassurances to adversaries under several well-defined circumstances . . . [and] includes the strategy of conditional reciprocity . . . [that] can be employed in pursuing the ambitious long-range objective of re-socializing 'rogue' leaders" (p. 271). This emphasizes the importance of the individual leader in situations demanding conflict resolution.

Several studies have highlighted the importance of political leaders regarding their personalities and the resultant behaviors (Goethals, 2005; Kaarbo, 1997; Steinberg, 2005; Winter, 2005). Likewise, contemporary organizational leaders are concerned with outcomes and actor specific theory suggests that those outcomes are shaped by the personality of the leader, the activities of the leader, and the relationships of the leader with other actors. This insightful theory clearly places responsibility on the person of the leader to be aware of their own personality as part of developing and honing their leadership skills.

Transformational Leadership Theory and Servant Leadership

For nearly 100 hundred years, there has been a steady progression of leadership theories that have benefited from prior research as theory influences practice and practice informs theory. Transformational leadership as proposed by Burns (1978) and extended by Bass (1998) followed earlier theories that emphasized behavioral, trait, charismatic, and situational leadership models. In this, progression scholars (Bass & Avolio, 1993) have pointed out an *augmentation effect* which suggests that transformational leadership supplements the outcomes of transactional leadership. Bass defined this phenomena as the degree to which

"transformational leadership styles build on the transactional base in contributing to the extra effort and performance of followers" (p. 5).

Transformational leadership theory and servant leadership are also complementary concepts with many similarities and yet distinct differences (Stone, Russell, and Patterson, 2004). More strongly stated, Patterson (2003) posited that servant leadership is a "logical extension of Transformational Leadership Theory, based on Kuhn's structure of scientific revolutions approach, which calls for new theoretical development when a theory no longer explains certain phenomena" (p. iii). Unexplained in transformational leadership was the phenomenon that exists when a leader focuses primary attention on meeting the needs of the individual follower rather than on the objectives and performance of the organization. While servant leadership has not yet been espoused as a full blown theory of leadership, and perhaps it does not need this distinction, it enjoys a legitimate place in the contemporary study of leadership principles. Sendjaya and Sarros (2002) instructed that "a leadership theory, must be able to, among other things, describe why leaders do what they do, support predictions about the consequences of specific leadership behaviours [*sic*], and prescribe specific circumstances under which leaders perform most effectively" (p. 63).

Transformational leadership has been defined as encompassing four leader-initiated characteristics: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Avolio, Waldman, & Yammarino, 1991). After much theoretical analysis by members of academe, Parolini (2007) conducted the "first empirical investigation of the distinctions between transformational and servant leaders" (p. iii) finding that

> The five statistically significant discriminate items include the leader's: (a) primary focus on meeting the needs of the organization or individual, (b) first inclination to lead or to serve, (c) primary allegiance and focus toward the organization or individual, (d) customary or unconventional approach to influencing others, and (e) attempt to control or give freedom through influence and persuasion. (p. iii)

The common link between the two styles of leadership seems to be that the leader initiates personality-influenced behaviors in dynamic relationship with others. The

primary difference between the two styles of leadership is the "focus of the leader. While transformational leaders and servant leaders both show concern for their followers, the overriding focus of the servant leader is upon service to their followers" (Stone et al., 2004, p. 354).

Transformational leadership was studied at the U.S. Naval Academy using the MBTI®. Roush and Atwater (1992) found that "leaders who were evaluated as sensing and feeling types by the MBTI® were the most transformational and used the most positive reinforcement with followers. Leaders who were introverts and sensing types had the most accurate self-perceptions" (p. 17). Popularity of the MBTI® has continued over the years and, more recently, Schneider and George (2011) conducted research reported to be the "first paper to compare directly servant versus transformational leadership in a voluntary organization . . . [assuming that] the successful transfer of traditional methods of management could prove highly effective in service organizations, charities, and other volunteer groups" (pp. 60-61). The results of their investigation concluded that "while transformational leadership and servant leadership are related constructs, servant leadership may be uniquely suited to the management challenges of volunteer organizations" (Schneider & George, 2011, p. 74). This conclusion points to an interesting understanding about leadership and motivation when salary is not a factor. In Jungian terms, perhaps there is a leadership archetype closely related to servant leadership that marks how people prefer to be guided by their leaders.

Philosophy of Servant Leadership

Greenleaf (1970) joined the two seemingly dichotomous words of servant and leader and suggested that it was possible to be a servant leader who successfully demonstrated a behavioral leadership style that emerged from a simple desire to be of service to others. The requisite natural feeling to first be of service to others was followed by a conscious choice to aspire to leadership. These words provide a direct connection to the personality and psychological components of a leader. As described elsewhere in this dissertation, self-awareness and the life-long journey to know yourself was explicitly called out by Reinke (2004), instructing

that the "servant-leader's behavior is grounded in his or her concept of self as a steward of the organization and its people" (p. 33). The motivation that drives servant leadership behaviors emanates from the values, beliefs, and principles of the person (Block, 1993; Farling, Stone, & Winston, 1999). The foundation of servant leadership is simply altruistic love and caring for others (Patterson, 2003) as representatives of society as a whole.

Servant Leadership as a Structurally Vertical Relationship

The notion of servant leadership is traditionally explained regarding leaders and followers in relationship with each other as part of an overall organizational structure. Power comes from position and the servant leader empowers others as a way of creating leaders throughout the organization (Russell & Stone, 2002). There is a notion here that followers have some choice in deciding who they will follow in organizational environments. Greenleaf (1977) addressed this matter noting:

> A new moral principle is emerging which holds that the only authority deserving one's allegiance is that which is freely and knowingly granted by the led to the leader in response to, and in proportion to, the clearly evident servant stature of the leader. (pp. 23-24)

More succinctly, Greenleaf highlighted that followers will "freely respond only to individuals who are chosen as leaders because they are proven and trusted as servants" (p. 24).

Maxwell (2007) generally defined leadership as an influence process where the leader supports and guides others in accomplishing mutually constructed goals. Regarding servant leadership, Greenleaf (1977) defined an explicit replication process with an outcome that could be assessed as the "best test, and difficult to administer. Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?" (p. 15). Servant leadership recognizes the uniqueness and value of individuals and treats them accordingly.

Servant Leadership as a Structurally Horizontal Relationship

The present study aligns with the traditional definition of servant leadership as it applies to vertical relationships in traditional organizational structures. However, it expands on this definition to include the idea of servant leadership as

encompassing horizontal relationships among organizational members. Greenleaf's (1977) best test was not explicit regarding the direction of relationships as either vertical or horizontal. Leadership is premised on influence and servant leadership is premised on the notion that leadership is founded on a trusting influential relationship rather than position.

Contemporary organizations are dynamic and co-location of workers in the same physical location or even time zone is not essential for meeting goals and objectives (Marquardt & Horvath, 2001). Teams of individuals form, perform required functions, and conclude without ever meeting each other face to face (Edmondson, Roberto, & Watkins, 2003). The practice of leadership in these environments takes on a distributed form shaped by interactions among people more than the actions of an individual leader (Spillane, Halverson, Diamond, 2004; Spillane, 2006). Leading is distributed among multiple leaders and followers in vertical as well as horizontal relationships dependent on the situation (Bento, 2011).

Servant leadership is possible and exists in modern organizations that are structurally flatter, more diverse, and global in scale. For example, organizations rely on cross-functional teams to improve product development cycles (Sarin & McDermott, 2003) and the associated decision-making processes. Modern project management techniques enable distribution of functional tasks without primary regard for colocation of resources. Ongoing development of communication technologies enables real-time progress to occur incrementally among many organizational actors. Appealing to path-goal theory (House, 1971), a primary function of a leader involves defining and clarifying the paths and behaviors that lead to goal attainment and valued rewards. When functional leaders are not available to make essential decisions, progress does not stop in an organization that practices servant leadership. Empowered by executive level leaders, different people share the role of decision maker in formal or *ad hoc* teaming arrangements. (Sarin & O'Connor, 2009). Team effectiveness is driven by the degree of servant leadership that exists in organizations.

Servant leaders may have a vertical form of positional leadership as part of a formal organizational structure but perceive themselves as *primus inter pares*—the first among equals in horizontal relationships across the organization. Executive servant leaders initiate an overarching vision for the organization and implementation occurs in concert with multiple empowered servant leaders who share a distributed form of service-oriented leadership (Buchen, 1998). Servant leadership at the organizational level is a collective process lived out individually by servant leaders across the organization in both vertical and horizontal relationships.

Servant Leadership Models and Selection of Criterion Variables

This section begins with a brief chronology of the scholarly efforts that defined the primary constructs of servant leadership and the resultant testable models. It concludes with rationale for selection of the three servant leadership behavioral characteristics that were employed in the present study—vision, empowerment, and service.

Servant leadership was postulated by Robert K. Greenleaf (1904-1990), the former director of management research at AT&T (Frick, 2004), after reading a novel that described the actions of a servant named Leo on an imaginary journey of modesty and sacrifice (Hesse, 1956). By definition, the way of servant leadership is based on the principle that the leader is a servant first before aspiring to the role of leadership. It is an understanding and practice of leadership that subjugates the self-interest of the leader for the good of others or followers. Christian tradition points to Jesus Christ as the ultimate model for servant leadership (John 13: 1-17; Luke 22: 25-30; Matt. 20: 20-28). With full appreciation of this argument, St. Augustine considered that the prime purpose for leadership was to meet the needs of others "regardless of the outcome" (Ciulla, 2004, p. 32). However, in the modern era, it was Greenleaf (1970, 1977, 1978, 1988, 1998) who is credited with highlighting servant leadership with an emphasis on personal character as a viable style of leadership for contemporary society.

Greenleaf's prolific writings influenced scholars and authors during the last part of the 20th century, while at the same time, Northouse (2007) noted that servant leadership lacked support from "published well-designed, empirical research" (p. 245). Based on an in-depth reading of Greenleaf's work, Spears (1998) identified 10 essential characteristics of servant leadership: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community.

Noting that servant leadership was attracting attention, "but little empirical research existed to support the theory or the anecdotal evidence used in the popular press material" (Farling et al., 1999, p. 49), researchers developed a spiral model of servant leadership focused around vision, influence, credibility, trust, and service. This important step initiated the development of several progressive models over the next decade.

Russell (2000) also acknowledged that the existing literature regarding servant leadership was mostly philosophical and anecdotal and therefore "lacks sufficient scientific evidence to justify its widespread acceptance" (p. 1). His response was a doctoral dissertation based on a literature review that distinguished approximately 20 attributes of servant literature and focused on "only five primary attributes: (a) vision, (b) modeling, (c) pioneering, (d) appreciation of others, and (e) empowerment" (Russell, 2000, p. 5) that could be used for empirical testing. Russell (2001) proceeded to accentuate the role of values in servant leadership, defining that "values are important parts of each individual's psyche. They are core beliefs—the underlying thoughts that stimulate human behavior" (p. 76). The character of leaders is defined by their personal value systems (Rokeach, 1973). According to Russell (2001), "values are the core elements of servant leadership; they are the independent variables that actuate servant leader behavior . . . [and] the internal values of servant leaders yield functional, distinguishable leadership attributes" (p. 79). Leadership behaviors are evidenced through the personality of the leader.

Sendjaya and Sarros (2002) examined the philosophical basis for servant leadership, citing the need for empirical research while acknowledging that "an

accurate understanding of the conceptual roots of servant leadership is essential in the process" (p. 57). At the same time, Russell and Stone (2002) described nine functional attributes of servant leadership because of their "repetitive prominence in the literature" (p. 146), as well as 11 accompanying attributes that enhanced the functional attributes. The functional attributes were identified as vision, honesty, integrity, trust, service, modeling, pioneering, appreciation of others, and empowerment. Two testable models were proposed to assist researchers in conducting empirical research at the personal and organizational levels of interest.

Patterson's (2003) doctoral dissertation set out to "present the theory of servant leadership as a logical extension of transformational leadership theory and to define and develop the component constructs underlying the practice of servant leadership" (p. 5). Based in virtue theory, Patterson's model was comprised of "(a) *agapao* love, (b) humility, (c) altruism, (d) vision, (e) trust, (f) empowerment, and (g) service" (p. 11; see Figure 2).

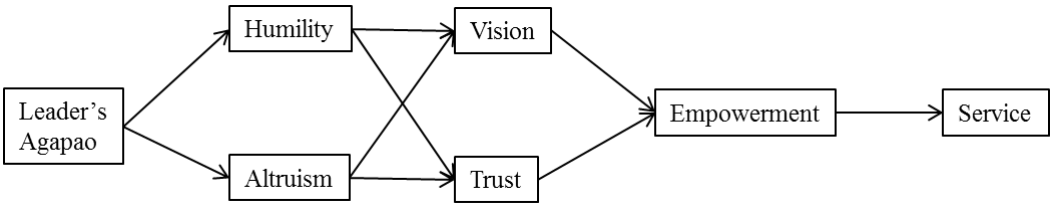

Figure 2: Patterson's original servant leadership model with vision, empowerment, and service. Adapted from *Servant Leadership Theory: A Theoretical Model* (p. 10), by K. Patterson, 2003, Virginia Beach, VA: Regent University (UMI No. 3082719). Copyright 2003 by K. Patterson. Adapted with permission.

Patterson modeled that leaders demonstrate *agapao* love through a sense of humility and altruism for the follower while articulating vision and building trust that leads to empowerment of the follower and concluding in service. Dillman (2004) extended Patterson's work by using her model to investigate servant leadership "among Australian pastors affiliated with the Church of the Nazarene"

(p. iii), finding that the specific constructs of servant leadership are well recognized in another culture. "Comparatively, Australian and United States pastors have significant similarities in their understanding of servant leadership and only an insignificant difference in the degree of its implementation in their lives" (Dillman, 2004, p. iv).

Winston (2003) critiqued Patterson's model and found that it was "one-directional from leader to follower and did not clearly explain how/why followers would commit to the leader in the interest of getting organizational tasks completed" (p. 1). An extended, full-circle model was proposed that included perspectives from the standpoint of the follower per Figure 3.

The Patterson/Winston model of servant leadership was extended again with the inclusion of hope as a way to "include a future-perspective to the model. . . [by introducing it] as a virtuous construct that is advanced by the leader and is a prerequisite for empowerment and for intrinsic motivation" (Cerff & Winston, 2006, p. 1; see Figure 4).

From a psychological perspective, Cerff (2006) suggested that hope theory "unlocks numerous possibilities for future research, including studies that examine how leadership development could incorporate hope theory and other positive psychology in its approach" (p. 60). There is a direct link between psychological research and leadership research.

The interest in servant leadership has increased steadily since Greenleaf's (1970) treatise over 40 years ago, yet contemporary scholars still "lack a unified accepted theory of servant leadership" (Winston, 2010, p. 186). A recent Delphi study was conducted to "more clearly define servant leadership by identifying primary characteristics of the phenomenon" (Focht, 2011, p. iii). A total of more than 100 characteristics were identified of which 64 were filtered through a Delphi panel resulting in the identification of 12 primary characteristics of servant leadership: "valuing people, humility, listening, trust, caring, integrity, [acts of] service, empowering, serving others' needs before their own, collaboration, love/unconditional love, and learning" (Focht, 2011, p. iii). It is interesting to note that "service" in Patterson's (2003) model became "acts of service" and "serving

others' needs before their own" in Focht's model. The constructs of servant leadership continue to evolve with time and scholarship.

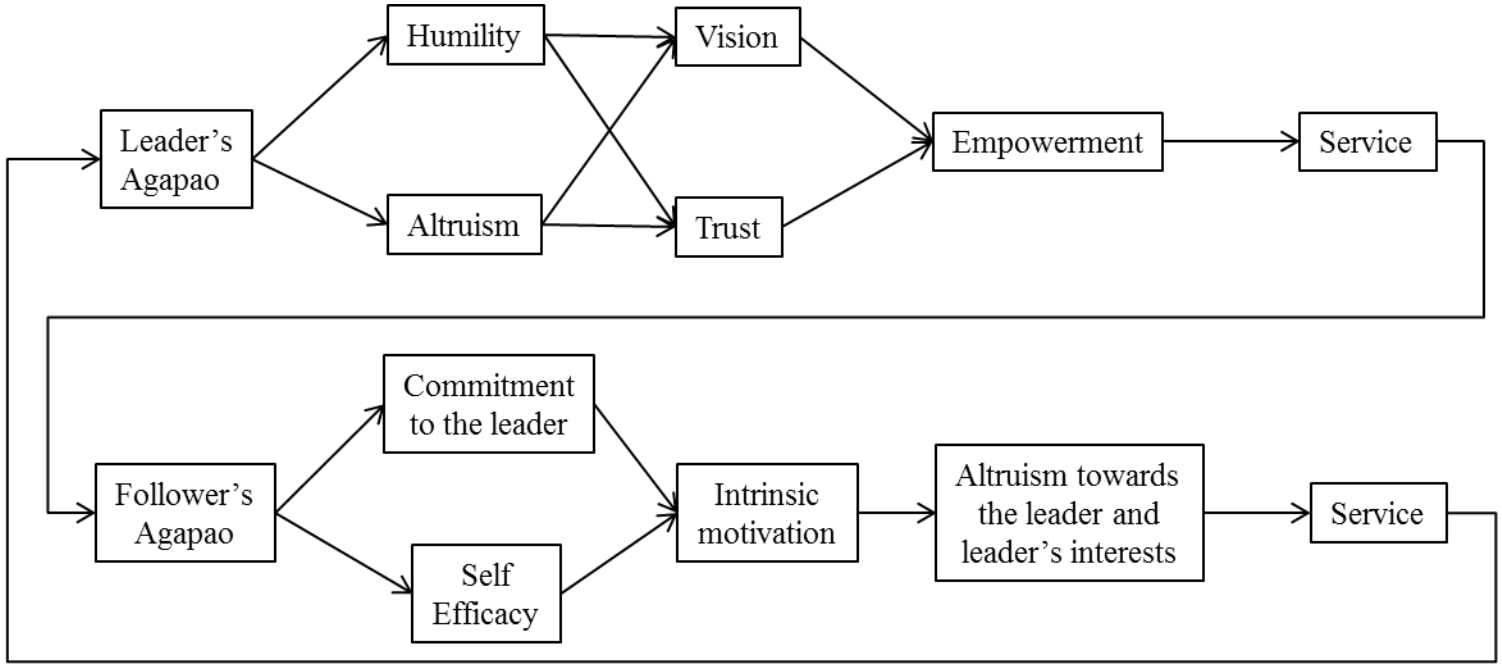

Figure 3: Winston's extension of Patterson's servant leadership model. Adapted from "Extending Patterson's Servant Leadership Model: Explaining How Leaders and Followers Interact in a Circular Model," by B. Winston, 2003, p. 6. Copyright 2003 by Regent University School of Leadership Studies.

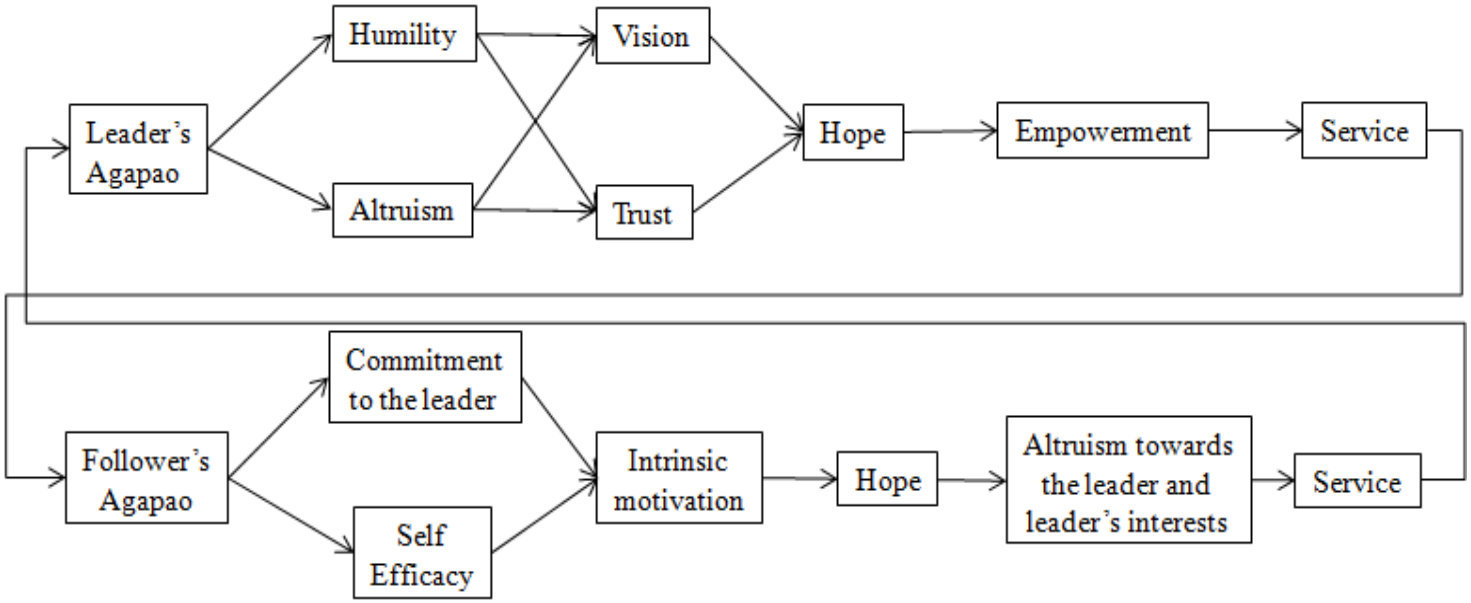

Figure 4: Cerff and Winston's addition of hope to the servant leadership model. Adapted from "The Inclusion of Hope in the Servant Leadership Model: An Extension of Patterson and Winston's Model," by K. Cerff & B. E. Winston, 2006, p. 5. Copyright 2006 by Regent University School of Leadership Studies.

In summary, a number of servant leadership characteristics have been identified, named, and studied in various research studies. A common thread of three primary constructs was identified starting early in the formulation of servant leadership that were carried forward in different testable models—vision, empowerment, and service per Table 2. Spencer (2007) looked at the frequency that different attributes of servant leadership were called out in various papers finding that vision, empowerment, and service were all well identified. Also, these three attributes, among others, were identified by Russell (2000) as exemplary in the life of Jesus Christ. It follows that these three constructs were the focus of the subject paper and are detailed in the following sections. The purposeful choice of these three behavioral characteristics was also driven by the need to identify a well validated and reliable self-report instrument capable of assessing them in the chosen research setting. The instrument employed in the study was the SLP-R© that is discussed in the next major section of Chapter 2.

Servant Leadership Characteristic of Vision

Simply defined, *vision* is the ability to see. Senge (2006) suggested that vision may be the oldest idea connected with leadership. Traditionally the word vision has been defined at the organizational level to mean "the capacity to hold a shared picture of the future we seek to create" (Senge, 2006, p. 9). Vision was identified as a specific attribute of servant leadership as early as 2000 (Russell, 2000). A vision of the future as a more desirable state than the present is an encouragement that organizationally makes the present a slightly uncomfortable place to remain in time. It initiates the beginning of a change process towards achieving something better.

Table 2: Progressive Identification of Servant Leadership Constructs

Spears (1998)	Farling et al. (1999)	Russell (2000)	Russell & Stone (2002)	Patterson (2003)	Focht (2011)
Listening	Vision	Vision	Vision	Love	Valuing people
Empathy	Influence	Modeling	Honesty	Humility	Humility
Healing	Credibility	Pioneering	Integrity	Altruism	Listening
Awareness	Trust	Appreciation	Trust	Vision	Trust
Persuasion	Service	Empowerment	Service	Trust	Caring
Conceptualization			Modeling	Empowerment	Integrity
Foresight			Pioneering	Service	Acts of service
Stewardship			Appreciation		Empowerment
Commit to people			Empowerment		Serve others needs
Community					Collaboration
					Love
					Learning

Note: Cerff and Winston (2006) added *hope* to the Patterson (2003) list.

Vision is an indispensable element for effective leadership (Blanchard, 1995). However, by definition, the servant leader is more focused on meeting the needs of the individual than in meeting the needs of the organization. Patterson (2003) altered the focus of vision from the organization to the individual person, pointing out that "vision for the servant leader refers to the idea that the leader can see this person as a viable and worthy person, believes in their future state, and thus seeks to serve them as such" (p. 12). Patterson clarified that the "leader is a visionary who sees the greatest potential in her followers and helps them develop clear feelings of purpose, direction, and dignity" (p. 3). This aspect of vision aligns well with Greenleaf's (1977) best test as a measure of servant leadership regarding whether those who are served grow as people. Using Jungian terminology, the servant leader seeks to steward the process of personal individuation as well as being concerned with the individuation of others.

Vision is futuristic. Buchen (1998) noted that a "key characteristic of the servant leader is preoccupation with the future . . . [and] one can determine whether a leader is a leader by the degree to which one is not just future oriented but future driven" (p. 131). Servant leaders are self-aware and know where they are going in community with others. The result is vision with clarity in mind about the future. Ultimately, a clear vision is an enabling factor in the decision another person makes regarding aligning or not aligning with the efforts of a servant leader. Regarding vision, Lewis et al. (2008) suggested that the INTJ personality type serves others by "deep and profound thought leading to clarity of vision and direction to help others see the way ahead. They are the true visionaries" (p. 32).

Servant Leadership Characteristic of Empowerment

Greenleaf has been called the "father of the empowerment movement" (Buchen, 1998, p. 132) since empowerment is an essential element of servant leadership. *Empowerment* has been defined as "the act of strengthening an individual's beliefs in his or her sense of effectiveness . . . it is not simply a set of external actions; it is a process of changing the internal beliefs of people" (Conger, 1989, p. 18). This involves a process of power sharing that marks the servant leader as *primus inter pares*—the first among equals. Buchen described the changes due

to empowerment as "in certain situations where the needs and the strengths required are different, someone else steps forth to become first among equals" (p. 132). Rather than power derived from position, the servant leader is interested in sharing power in order to develop leadership qualities in others. "Empowerment aims at fostering a pro-active, self-confident attitude among followers and gives them a sense of personal power. Empowering leadership behavior includes aspects like encouraging self-directed decision making, information sharing, and coaching for innovative performance" (van Dierendonck & Nuijten, 2011, p. 251).

The servant leader acknowledges that others have intrinsic value because they are uniquely human (Konczak, Stelly, & Trusty, 2000; Patterson, 2003). Empowerment involves giving others an opportunity to share leadership by moving individuals into new and different environments so that they may grow and progress toward their own emerging role as leaders. The servant leader values the contribution of others because he knows their needs and is concerned about meeting their needs through empowering behaviors such as effective listening, encouraging teamwork, and making them aware that their efforts are important (Russell & Stone, 2002).

Empowerment implies a relationship of trust between the servant leader and others. It involves entrusting others with power and responsibility with an understanding of the accountability that goes with it (Costigan, Titer, & Berman, 1998). This form of service to others enables them to find their own way towards individuation that has their best interests at heart. Regarding empowerment; Lewis et al. (2008) suggested that the ENFJ personality type serves others by "directing and motivating others to work together in a spirit of friendship and community. They serve through organizing others in service" (p. 32).

Servant Leadership Characteristic of Service

Referring to Patterson's (2003) model of servant leadership (Figure 3), service is the product or outcome of all the attributes that precede it. It is all-inclusive. Van Dierendonck and Nuijten (2011) informed that "in servant leadership the ideal of service is embedded in the leader–follower relationship" (p. 249). Without service, there is no servant leadership. Servant leaders are first of all servants that

provide value-added service to others. The notion of adding value applies to the other characteristics of servant leadership as well so that the other characteristics are enhanced by the leader's service. Lewis et al. (2008) acknowledged that "service comes in all shapes and sizes. You can have practical service, social service, theoretical service, and idealistic service" (p. 9).

Leaders model the attribute of service that emanates from their values and beliefs which is then evidenced in their personal behavior. Wis (2002) shared that "servant-leaders are not focused on displaying their gifts; rather, they use gifts to make a difference, to create positive change. In this way, they serve rather than impose" (p. 20). When leaders act as role models, they stimulate others to act in a similar manner. However, Hall (1991) noted that "doing menial chores does not necessarily indicate a servant leader. Instead a servant leader is one who invests himself or herself in enabling others, in helping them be and do their best" (p. 14).

An important element of service is the notion of stewardship or the function of taking care of something as an agent for another person (Russell & Stone, 2002). There is a sense of responsibility that comes with being a steward that reveals itself in the actions of the servant leader toward others. Service implies accountability and giving to others the personal resources of time, energy, and personal involvement. When leaders serve as examples for others to emulate, they "represent a feeling of identification with and sense of obligation to a common good that includes the self but that stretches beyond one's own self-interest" (Peterson & Seligman, 2004, p. 370). Regarding service, Lewis et al. (2008) suggested that all 16 personality types serve in some capacity and specifically suggested that the ENFP personality type serves others by "connecting others to ideas and possibilities for their growth through focusing others' needs for human contact. They are the networkers of service" (p. 32).

Servant Leadership Instrument

The evolutionary formulation of the constructs of servant leadership into models that could be tested in the leadership environment required reliable and validated instruments in order to make sense of the development process. The

challenge was to distill the scores of postulated characteristics of servant leadership into methodological designs (Farling et al., 1999). Early "servant leadership research showed quite some content overlap in the operationalisation [*sic*] of the different dimensions underlying the proposed measure" (van Dierendonck & Huijten, 2011, p. 250).

One of the first servant leadership measurement instruments was the Self-Assessment for Servant Leadership Profile© (SASLP©) created by Page and Wong in 1998 (Page & Wong, 2000). It is interesting to note that this instrument was designed as a self-assessment rather than an attributional tool since the constructs of servant leadership were being better defined by academe at this time. The original 1998 survey instrument included approximately 200 characteristics of servant leaders, but this number was later reduced to a 99-item list. Twelve categories were determined that aligned with the 10 characteristics of servant leadership described by Spears (1998). Development continued (T. A. Taylor, 2002; Wong & Page, 2003) and the 12 categories were segregated into the four orientations of (a) character (being or personality), (b) people (relating or relationship), (c) task (doing or productivity), and (d) process (organizing or efficiency) in a new instrument named the Servant Leadership Profile© (SLP©) as a self-report instrument. Note that one of the orientations was personality acknowledging a link between the psychological nature of the person of the leader and servant leadership behaviors. After factor analysis was performed, the number of factors was reduced from 12 to 8. These 8 factors were analogous to characteristics identified by other researchers.

Dennis and Winston (2003) "set out to extend the work of Page and Wong's work and to see if their items would reduce to the factors that they originally intended" (p. 455). Statistical factor analysis verified three of the original categories: vision, empowerment, and service. The additional work concluded that "this scale represents a potential tool with positive implications for training new and existing leaders" (Dennis & Winston, 2003, p. 456). The self-awareness that results from evaluating the SLP© scores is instructive in the leadership development process.

In parallel, Wong and Page (2003) continued to refine their model and proposed an opponent-process model that included two new subscales: abuse of

power and egotistic pride. The result was the Servant Leadership Profile—Revised© (SLP-R©) instrument comprised of seven subscales and 62 randomized items. An initial study using the SLP-R© identified seven factors: developing and empowering others, power and pride, visionary leadership, servanthood, responsible leadership, integrity (honesty), integrity (authenticity), and courageous leadership. The instrument was well received and Wong and Davey (2007) reported that the "Servant Leadership Profile—Revised has been used by more than 100 organizations and universities for research and evaluation purposes. A 360-version has also been developed and used" (p. 5). This SLP-R© has withstood the rigors of development and analytical critique and is actively being used by servant leadership researchers.

Contol Variables

Control variables or intervening variables are traditionally used in multivariate analysis. Babbie (2007) instructed that once a relationship is posited between primary study variables, "we seek to understand the nature of that relationship through the effects produced by introducing other variables" (p. 435). The present study employed four such variables as (a) gender, (b) age, (c) years of employment in the research setting, and (d) organizational role defined as whether the research subject had direct reports per the formal organizational structure of the research setting.

Regarding gender, theoretical papers have been written and empirical research has been conducted suggesting relationships between servant leadership and gender. In a model paper, Duff (in press) proposed that "leader gender will moderate leader style, with female leaders demonstrating greater propensity towards the use of person-centered leadership approaches including transformational and servant leadership than male leaders" (p. 12). Reynolds (2011) suggested in a theoretical paper that "the distinguishing elements of servant leadership add more feminine gendered behaviors to the leadership construct. As such, the servant leadership model can serve as a driving force for generating discourse on gender integration in organizational leadership" (p. 159). However,

research conducted by Dannhauser and Boshoff (2006), using gender as a variable in an empirical study that measured servant leadership, trust, and team commitment, found that "the scores of the two gender groups did not differ significantly on any of the variables" (p. 10). Gender differences are valid considerations in servant leadership research.

Regarding age and years of employment in the research setting, these two demographic characteristics reflect the general accumulation of life experiences over time and are not uncommon to measure in the study of leadership (McCrae et al., 2004). Dennis and Winston (2003) considered age as a variable of interest in conducting a factor analysis of Page and Wong's SLP-R® that confirmed the instrument as a useful tool in leadership development. Differences in self-perceptions of leadership based on age were found by Kazan (2000) and Payden (1996). Barbuto, Fritz, Matkin, and Marx (2007) found the "effect of the leader's age on followers' ratings of transactional and/or transformational leadership style was significant" (p. 80). Finally, Horsman (2001) found differences in servant leadership as a result of age differences. Age and years of employment in the research setting are valid considerations in servant leadership research.

Regarding organizational role in the structural matrix of the research setting, whether a survey respondent had direct reports in a leader–follower relationship was atypical in servant leadership studies and seemed contrary to the traditional definition of a servant leader that implies a formal leader–follower relationship between persons. As described earlier in Chapter 2, servant leadership is more than a positional form of leadership. Servant leaders exist in both vertical and horizontal relationships across organizations. This variable added interest and value to the present study.

Summary of the Literature Review Including Testable Hypotheses

In conclusion, this chapter established a comprehensive theoretical framework for exploring the linkage between Jungian analytical psychology as practically implemented in the MBTI® personality preference assessment instrument and Greenleaf's (1977) servant leadership behavioral characteristics of

vision, empowerment and service as identified by Patterson (2003). The evidence was clear regarding how personality preference influences behavior and behavior demonstrates servant leadership characteristics.

As a result, hypotheses were formulated defining testable relationships between the research variables. The hypotheses in this study emerged from the research problem and are inference statements relating the variables of interest. The tested hypotheses are shown pictorially in Figure 5.

The hypotheses in the present study are:

H_1: There is a positive relationship between a self-reported servant leadership characteristic of vision and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

H_2: There is a positive relationship between a self-reported servant leadership characteristic of empowerment and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

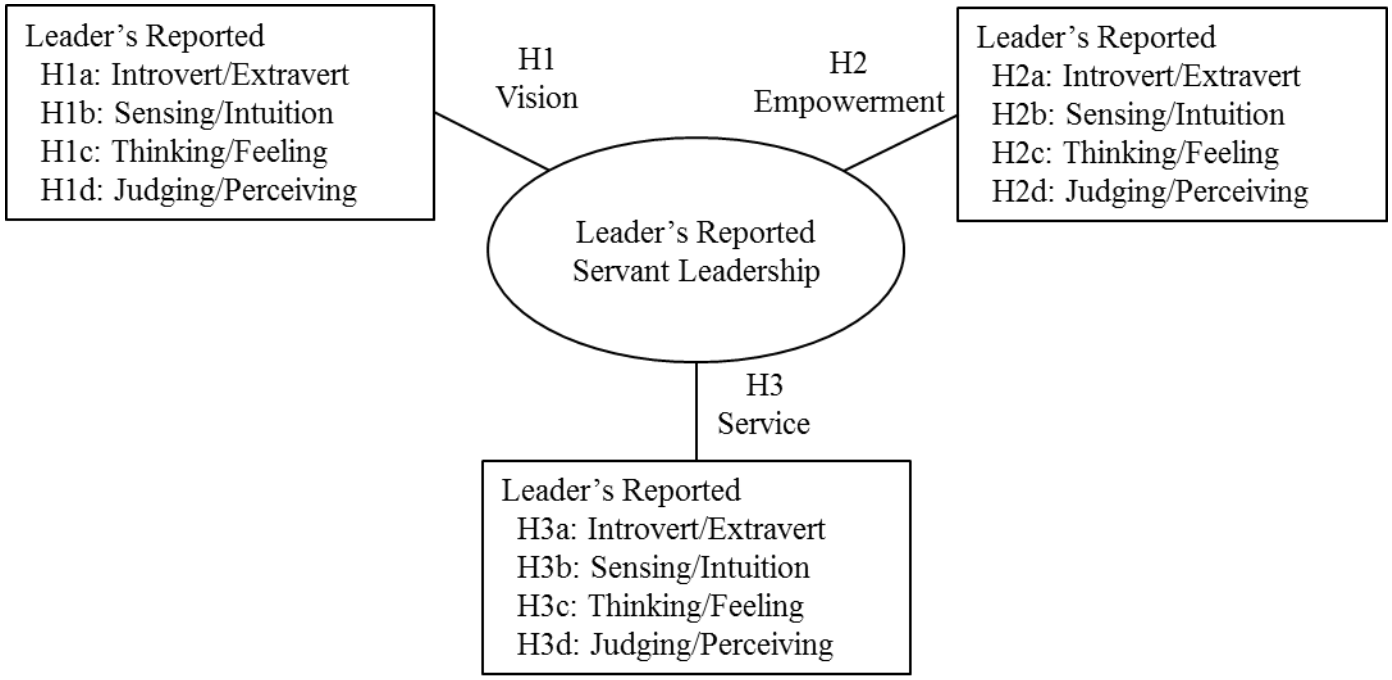

Figure 5: Hypothesized relationships between predictor and criterion variables.

H_3: There is a positive relationship between a self-reported servant leadership characteristic of service and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

Chapter 1 introduced the present study providing an overview of the link between a typology of personality preference as proposed by Jung (1921) and later operationalized by Myers and Briggs (Myers et al., 2003) in the MBTI® with the servant leadership characteristics of vision, empowerment, and service as portrayed by Greenleaf (1977). It summarized the call for the empirical research, set forth the conceptual framework for conducting the study, explained the significance of the study, and defined the scope and limitations of the study. Chapter 2 followed up with a comprehensive literature review regarding the research subjects which led to identification of specific hypotheses and their testable relationships. Chapter 3 describes the specific research design providing details about the testing of the hypothesized relationships between the predictor and criterion variables. Chapter 4 provides the results of the inferential statistical analyses used to make sense of the aggregated quantitative data. Chapter 5 examines the results detailed in Chapter 4.

Chapter 3 – Method

Creswell (2003) defined *research* as "a process of steps used to collect and analyze information to increase our understanding of a topic or issue" (p. 8) and, as such, Chapter 3 describes the research method employed in the present study. Details regarding the nonexperimental, quantitative research design are provided along with the selection and rationale for the research setting. Definition of the sampling frame is included with information about sample size determination and the sampling method as well as the data collection method. Information about the operational measures is detailed including a novel treatment of Myers Briggs Type Indicator (MBTI®) raw score data, selection of control variables, and rationale for the data analysis method. Descriptive statistics are included prior to inferential statistical analyses that are detailed in Chapter 4. Chapter 3 concludes with explanation of decision rules used during data analysis.

Research Design

Kerlinger and Lee (2000) instructed that "research designs are invented to enable researchers to answer research questions as validly, objectively, accurately, and economically as possible" (p. 450). The present study incorporated a psychodynamic approach with an individual level of analysis specifically using a nonexperimental, quantitative survey method. The subject study included four independent or predictor variables represented by different personality types as assessed by the MBTI® instrument, three dependent or criterion variables represented by different characteristics of servant leadership as assessed by the Servant Leadership Profile—Revised© (SLP-R©) instrument, and four control variables represented by different demographic characteristics.

Following an effective and efficient information gathering period, the collected data from the two survey instruments were inspected to assure that criteria were met for use in creating regression models to provide inferential understanding about the research variables. Multiple regression analyses were not conducted until (a) a novel linear transformation of the MBTI® raw scores with associated scale definition was performed creating four new continuous type variables, (b) a linear

transformation of the SLP-R© data was performed creating three new variables to enable better comparison and contrast of the raw scores, and (c) the four demographic variables were reviewed regarding the requirement for a representative sample.

Chapter 4 provides additional detail regarding data handling as well as results of hypotheses testing using multiple regression analysis. The intended result of the multiple regression analyses was the creation of three different models to examine the hypothesized relationships among the 11 research variables. The models were used to suggest theoretical or associative interactions among the predictor and criterion variables as influenced by the intervening or control variables.

Research Method

The overarching approach used to explore the relationships in the present study was a middle-range analysis that is recognized as a well-established standard in sociological theory construction (Merton, 1968). Middle-range theory begins with experiential phenomena and conceptually extracts general statements from it that can be tested using empirical data. The practical results inform theory and the process iterates as revised theory can again be tested in purposed studies. Rogers (1995) pointed out that in middle-range analysis, that a "theory that cannot be tested is useless, and data that are not related to theoretic hypotheses become irrelevant" (p. 128). In the present study, psychologically-based personality type theory was tested in the specific area of servant leadership behaviors and empirical hypotheses were either accepted or rejected based on inferential statistical sense making so that knowledge was created and is now available to academe.

The present study employed the ontological and epistemological premises of postpositivism (Phillips & Burbules, 2000). This perspective used the scientific method as the means for directing human curiosity to investigate leadership phenomena and to acquire empirical and measurable information. However, this knowledge was considered nonabsolute or conjecture since it was based on incomplete or perhaps inconclusive information about the behavior of the human

subjects involved in the study. This position aligned with a middle-range analysis that iterates theory development and investigative practice. In addition, postpositivism holds a deterministic perspective looking for "causes that influence outcomes. . . [and is] reductionistic in that the intent is to reduce the ideas into a small, discrete set of ideas to test, such as the variables that constitute hypotheses and research questions " (Creswell, 2003, p. 7). As such, the postpositivistic point of view chosen for the present study recognized that all observations are imperfect and as a result have certain inherent error. Therefore, all theory is revisable based on ongoing research. This awareness influentially shaped the research design of the present study and the choice of a psychodynamic focus.

The psychodynamic approach used in the present leadership study focused on the person of the leader and the inner psychological forces that affect their behavior. By definition, the psychodynamic approach is broad and without a particular model or theory. However, the essential idea that undergirded this approach was simply personality. Appealing to this well-established approach, the study assessed individual differences in distinguishing patterns of behavior. Northouse (2007) instructed that the "psychodynamic approach starts with analyses of personality and then relates the personality types to leadership levels and types" (p. 238). Historically, efforts have described leadership using a psychodynamic predisposition (Berens et al., 2001; Maccoby, 1981) and "all emphasize the importance of the leader becoming aware of her or his own personality type and the personalities of followers" (Northouse, 2007, p. 238). The present research aligned well with this approach.

The psychodynamic approach supported an individual level of analysis as the best choice for the research design. The individual level of analysis focused on the person of the leader as a primary actor in leadership studies. At this level, personal behavior is a principal factor in organizational behavior and involves the study of personality drawing heavily on the field of psychology. The study of leadership and individual differences are well-recognized areas of study that were recently described as being on the "cusp of a renaissance" (Antonakis, Day, &

Schyns, 2012, p. 643) with a renewed appreciation that individual actors make a difference in organizational outcomes.

Consideration of the time frame for the present study was an important element in defining the research design. A descriptive cross-sectional study was selected and involved "observations of a sample, or cross section, of a population or phenomenon that are made at one point in time" (Babbie, 2007, p. 102). This snapshot method permitted a resource-effective approach that examined the current state of the servant leadership environment in the research setting. A longitudinal approach that assesses changes over time was beyond the scope of the present study and avoided the inherent problems and complexities of time designs in that "statistical analysis of time measures is a special and troublesome problem. The usual tests of significance applied to time measures can yield spurious results" (Kerlinger & Lee, 2000, p. 545). A cross-sectional research design aligned well with the middle-range analysis and psychodynamic approach used in the study.

The present research coupled a descriptive cross-sectional study with a survey method in order to obtain data from a number of subjects in the research setting that was then used to generalize from the sample to the population using inferential statistics. Surveys have been used for centuries to obtain information about human subjects. Moses, the Old Testament leader, took a census of the people to obtain information regarding military readiness before going to battle (Num. 26). Jesus was not born in his home town because Joseph and Mary were required to travel to Joseph's ancestral home to take part in a Roman census (Luke 2). In this regard, historically, as well as pertaining to the present study, survey data provided an economically significant amount of information that was immediately available for decision making. Babbie (2007) pointed out that "survey research is probably the best method available to the social researcher who is interested in collecting original data for describing a population too large to observe directly" (p. 244). The present study incorporated a sample size discussed later in the chapter that made the survey method the most viable option.

The previously described factors took shape in a nonexperimental, quantitative research design where well-validated and reliable survey instruments

were used to collect data that were analyzed using descriptive and inferential statistical analyses. The present study was nonexperimental in the sense that data collection occurred without using a control group or experimental group. Survey instruments were completed by voluntary research subjects and those responses were converted into numeric data that were used for statistical analyses. Quantitative research is derived from the philosophical and theoretical perspectives of postpositivism where knowledge emerges from observation of the physical world and researchers make inferences based on those observations as was the case in the present study.

A hoped for, but not always realized, goal of quantitative research is establishing a cause and effect relationship or at least an associative relationship among the research variables. The present study was formulated as a nonexperimental design that is defined as a "systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestaions have already occurred or becaue they are inherently not manipulable" (Kerlinger & Lee, 2000, p. 558). As such, the predictor variables of personality type were acknowledged to be dynamic and outside the control of a descriptive cross-sectional study. Tabacnick and Fidell (2007) instructed that "one can make an airtight case for causal relationship among variables only by showing that manipulation of some of them is followed inexorably by change in others when all other variables are controlled" (p. 122). Caution was advised and particular attention was paid to assigning cause or not assigning cause due to effects revealed by statistical analyses. As noted further in this chapter, the subject study set significance level alpha (α) and power ($1 - \beta$) according to established research norms for the social sciences.

Research Setting

Selection of the research setting was an important element of the overall research design. Several search factors were considered as follows: (a) an organization with diversity among its leaders, (b) an organization that claimed to emphasize servant leadership as one of its guiding values, (c) an organization that

was large enough to support the sample size, and (d) an organizational form that was under researched in the study of leadership. An organization meeting the noted criteria was found in a very large megachurch environment. The sampling frame for the study was defined as the total employee base of the church which equaled 200 individuals at the time of the study.

A megachurch was defined as a Protestant congregation with a sustained average weekly attendance of 2,000 persons or more in its worship services ("Megachurch," n.d.). The number of churches in the U.S. that met the constraints of this definition was approaching 2,000 at the beginning of the present study. However, there were some churches included as a subset of this total number with more than 15,000 persons that meet locally in weekly services with additional participation via Internet live streaming. The subject study used the term very large megachurch to designate this unique megachurch category.

The research setting of a very large megachurch was selected for the following reasons:

1. Addressing the subject of *social capital* (Bunting, 2007), Robert Putnam, the renowned political scientist and Harvard University professor, identified the megachurch phenomena as the "most interesting social invention of the late 20th century" (Smith, 2001/2007). The present study offered the opportunity to explore the personality types of the church's many leaders with links to characteristics of servant leadership in a distinctive research environment.
2. Servant leadership is a style of leadership that is espoused by the contemporary evangelical church in the U.S. but little has been accomplished to date in assessing the degree of servant leadership that is evident in religious institutions with a link to the personality preference of its leaders.
3. The very large megachurch employed in the present study has grown over the past 10 years from an average of 3,000 to nearly 20,000 worshippers who participate in multiple weekend worship services at five different locations. Due to its rapid growth, the church has required

additional staff with an increasingly complex division of labor and departmentalization. The practice of servant leadership may be a key to increased social capital and numerical expansion.

4. The dynamic of leadership that exists in the very large megachurch context has been inadequately researched or not at all (Bird & Thumma, 2011).

Sample

Concerns regarding formal sampling procedures were a significant part of formulating the present research design. Proper sampling results in a match between the sample and sampling frame distributions on key research attributes with consideration for sampling error so that research results can be generalized to a wide range of applications (Shadish, Cook, & Campbell, 2002).

Error

Prior to establishing sample size for the present study, several decisions were made regarding the parameters that influence the determination. The statistical significance level alpha (α) was set at .05 which is the traditionally accepted level of significance for social science research (Hair, Black, Babin, Anderson, & Tatham, 2006). Another way of describing alpha is terming it a Type I error (false positive) or saying a difference or correlation exists when, in fact, it does not exist. Conversely, a Type II error (false negative) is the chance of not finding a mean difference or correlation when it does exist. A Type II error is termed beta (β) and is inversely related to a Type I error. Power, or correctly identifying a hypothesized relationship when it truly exists, is the value of (1 - β) or 1 minus the Type II error. Power was set at .80, which is acknowledged as an appropriate level for behavioral research (Cohen, 1988). According to Cohen (1988), a 4:1 ratio signifies the level of seriousness of a Type I error relative to a Type II error. It follows that when alpha is .05, the probability of a Type II error is 4 x .05 = .20, which defines power as 1 - .20 = .80 (i.e., 1 - β) for the study.

Sampling Frame

The sampling frame for the present study was the total number of employees of a very large megachurch in south Florida. The total employment during the data collection phase of the subject research was 200 people. The structurally matrixed organization provided a unique setting for the subject research that emphasized the relationship between leader personality preference and servant leader behaviors.

Sample Size

Kerlinger and Lee (2000) pointed out that the "process of determining sample sizes for research studies is not a trivial or easy process. In fact, Williams (1978) says it is one of the most difficult problems in applied statistics" (p. 296). In the present study, sample size determination required decisions about the type of sample, population variability, desired power, alpha level, number of variables, and effect sizes (Mitchell & Jolley, 2007; Tabachnick & Fidell, 2007). The choice of sample size and the sampling strategy ultimately affect the validity of the study results. Multiple regression was used as the primary inferential statistical analysis method for the study. Hair et al. (2006) informed that the "sample size used in multiple regression is perhaps the single most influential element under the control of the researcher in designing the analysis" (p. 194).

Setting the employment number or sampling frame equal to the yet to be defined minimum sample size, the question immediately arose regarding the adequacy of this sample size in performing required statistical analyses to achieve the intended outcomes of the study. Three sources of guidance were applied in establishing sample size for the present study.

First, prior research of a similar nature was consulted for direction in formulating the subject research design. There was no specific guidance from previous studies similar to the present study to help define sample size. There were only a few qualitative papers that looked at personality type and servant leadership (Lewis et al., 2008; Waddell, 2006). There was a clear call for empirical research but no specific research studies were completed that could be used for reference.

Second, textbooks were consulted that convert statistical theory into different options for consideration by researchers. Hair et al. (2006) pointed out that "in multiple regression power refers to the probability of detecting as statistically significant a specific level of R^2 or a regression coefficient at a specified significance level for a specific sample size" (p. 195). The question of adequate sample size focused on (a) the number of independent variables, and (b) the value of R^2 (coefficient of determination). Specific to the subject study, the total number of independent variables appropriately included the four control variables; so for purposes of establishing sample size, there were eight predictors plus three dependent or criterion variables. Hair et al. (2006) offered specific guidance to researchers instructing that a sample size of 100 with a significance level (α) = .05 and 10 independent variables resulted in R^2 = 15.

Using these parameters as a point of departure, the present research design incorporated a total of 11 independent or predictor variables and three dependent or criterion variables, specified a significance level (α) = .05, specified a power of .80 or was satisfied with identifying the R^2 in 80% of the time it occurred, and specified a minimum sample size of 100 subjects that was capable of detecting R^2 values of approximately 15% and greater (Hair et al., 2006). Therefore, the present study data-gathering phase began with distribution of 130 individual survey packages and an assumed response rate of 80% with the need for minimal data cleansing in order to achieve a minimum sample of 100 usable sets of survey data.

The present study considered a third way to think about sample size. When the sample size is relatively large compared to the sampling frame, there is greater confidence that the sample statistic is representative of the population and has a positive effect on confidence level and confidence interval (Babbie, 2007). The ratio between sample size and sampling frame size was relevant for the present research. Assuming 200 employees and a sample size of 100, the ratio of 100/200 = .50 and overall sampling uncertainty was low.

In conclusion, different methods of determining sample size were described in this section. A conservative sample size of 100 was selected and employed for the study.

Sampling Method

Sampling is defined as selecting a proportion of a population or universe and considering it to be representative of that population or universe (Kerlinger & Lee, 2000). A representative sample is one where the chosen subset of the population has approximately the same characteristics as the population in question. The present research realized that a certain amount of sampling uncertainty was an inherent part of the study because it was not possible to implement or defend a selection and data gathering process resulting in a truly representative sample.

Therefore, the subject research design took purposeful steps to minimize sampling bias and to minimize sampling uncertainty with the intent to assure that no member of the sampling frame had a greater chance of being selected than another person. The present research employed a proportionate stratified random sampling plan where the researcher "make(s) sure the sample is similar to the population in certain respects" (Mitchell & Jolley, 2007, p. 236). As such, the total number of employees was determined and identified as members of the organizational research setting. This total headcount was observed to be structurally divided among a small number of key organizational leaders. Stratification occurred by allocating a percentage of survey instrument packages to each major functional part of the matrix organization. Randomization occurred by asking each key organizational leader to distribute and collect survey packages within their functional part of the organization. The subject research sampling method was intentionally used to select a sample for statistical analyses with reduced sampling uncertainty.

Data Collection

The data collection phase gathered numeric data that represented the self-reported qualitative characteristics of personality preference and leadership behavior using two validated and reliable survey instruments. The process was used to "set up the framework for study of the relations among variables" (Kerlinger & Lee, 2000, p. 450). The framework involved subject willingness to convert personal life

experiences into predetermined response categories. The aggregated data was available for analyses utilizing appropriate statistical methods.

A total of 130 individual survey packets were prepared and distributed to key organizational leaders with direct reports according to the earlier described proportionate stratified random sampling plan. Each sealable envelope or packet contained a single page instruction sheet including a section to collect demographic data, a paper and pencil version of the MBTI® self-scorable Form M, and a paper and pencil version of the SLP-R©. The packets were not marked or coded in order to maintain subject confidentiality.

Just prior to distribution of the survey packets, a short video was prepared by a senior executive of the research setting and distributed to members of the sampling frame via internal organization messaging. The video encouraged participation in the survey, instructed survey subjects on how to complete the two research instruments, and requested the subject to return the sealed packet to the person who provided it to them. There was no coercion to complete the survey materials since the subject research concerned self-report information rather than obtaining data regarding a leader–follower relationship.

Data collection was completed during a relatively short 20-day time period. The effective and efficient data collection process was enabled by careful preparation of the survey packets preceding the start of data collection coupled with the instructional video from a senior executive that provided support and credibility for the effort. As a result, the response rate was 85% with minimal need for data cleansing. The present research used a total of 107 data sets for statistical analysis.

Operational Measures and Type of Data

Albert (1998) observed that "one should not expect to define the construct and agree on its measurement except after a long process of empirical inquiry and questioning" (p. 3). This awareness, coupled with the stance that the present study intentionally aligned with a middle-range analysis regarding theory development and a postpositivistic position regarding the subjective nature of knowledge, identified the need to choose reliable and valid survey instruments for use by

research subjects. The subject study used two psychometric instruments: (a) the MBTI® Form M self-scorable version to assess personality preference, and (b) the SLP-R© (Wong & Page, 2003) to assess servant leadership dispositional characteristics. Permission was obtained to use the copyrighted SLP-R©. Both instruments were available in a paper-and-pencil format which was the format employed in the subject study.

MBTI® and Data Type

The MBTI® has been used for approximately 40 years in different forms and in diverse environmental contexts both domestically and internationally to assess the self-reported personality type preferences of individuals. It has been administered to literally millions of people throughout the world and is a benchmark in personality preference type assessment. Ongoing development over the decades paralleled with regular scholarly critique demonstrated the MBTI® to be both valid and reliable when used properly (Bess, Harvey, & Swartz, 2001; Edwards et al., 2002; McCrae & Costa, 1989). Chapter 2 highlighted development of the MBTI® with an advisory note that the "MBTI definitely has a place in leadership development programs if used with caution" (James, 2003, p. 79) when raw scores are not definitive in categorizing the different dimensions of personality (i.e., extraversion/introversion). For this reason, a self-scorable paper and pencil version of the MBTI® Form M was employed in the present study so that raw score data was available for statistical analyses. The present study employed a novel data analysis method with associated scale construction to address the concern regarding nondefinitive personality preference categorization as explained further in this section.

The MBTI®, based in Jungian psychology, posited that personality preference can be measured and specific personality types can be identified based on this measurement. Type theory assesses *what kind* as an either/or dichotomy whereas trait theory assesses *how much* as a matter of degree. By this definition, the eight independent variables regarding personality preference were categorical variables. For example, a person was an extravert (E) and not an introvert (I) and this ability to apply a unique label fit the definition of nominal data.

However, using Jungian vocabulary, no person is a pure type demonstrating extraverted or introverted behavior 100% of the time. The MBTI® Form M acknowledged this actuality and provided a preference clarity category that, depending on the raw-point score, classified the dichotomous personality preference categories as slight, moderate, clear, or very clear (see Table 3). "The preference clarity index is an estimate of relative confidence that a preference has been accurately identified" (Myers et al., 2003, p. 121). The index clarified how consistently a person preferred their polar opposite behavior as part of their self-reported personality preference assessment.

Table 3: MBTI® Preference Clarity Category Based on Raw-Point Range

MBTI® personality preference	Preference clarity category	Raw-point range
Extraversion (E)/introversion (I)	Slight	11-13
Extraversion (E)/introversion (I)	Moderate	14-16
Extraversion (E)/introversion (I)	Clear	17-19
Extraversion (E)/introversion (I)	Very clear	20-21
Sensing (S)/intuition (N)	Slight	13-15
Sensing (S)/intuition (N)	Moderate	16-20
Sensing (S)/intuition (N)	clear	21-24
Sensing (S)/intuition (N)	Very clear	25-26
Thinking (T)/feeling (F)	Slight	12-14
Thinking (T)/feeling (F)	Moderate	15-18
Thinking (T)/feeling (F)	clear	19-22
Thinking (T)/feeling (F)	Very clear	23-24
Judging (J)/perceiving (P)	Slight	11-13
Judging (J)/perceiving (P)	Moderate	14-16
Judging (J)/perceiving (P)	Clear	17-20
Judging (J)/perceiving (P)	Very clear	21-22

In this sense, the eight independent variables identifying personality preference were ordered variables and the four preference clarity categories were labeled as descriptors or ordinal data.

However, categorical and ordinal data are often difficult to use in personality research when personal behavior is dynamic and type theory becomes lived out practice in the daily experiences of leaders. Recognizing this reality, practitioners of the earlier MBTI® Form G instrument developed a method to transform the preference clarity category data into interval data using mathematical transformation. This methodology was helpful to scholars interested in a more detailed investigation of their research data (Edwards et al., 2002). When Form M became the MBTI® standard instrument in 1998, the ability to transform categorical data into interval data was retained but was not made as readily accessible to the researcher. One of the enhancements in Form M was that all 93 items were written as forced choice options with only two possible responses and the online instrument was computer scored using principles of item response theory (Fraley, Waller, & Brennan, 2000; Hambleton & Swaminathan, 1985; Reise, Widaman, & Pugh, 1993). Item response theory was developed as a way to provide a model-based link between item responses and the latent characteristic being assessed by the associated scale. The MBTI® Form M preference clarity index was formulated based on item response theory using proprietary Consulting Psychologists Press (CPP) data, the publisher of all MBTI® materials. However, the CPP proprietary algorithm that converted the four dichotomous scales to interval data ranging in value from -30 to +30 was not made available to researchers for general usage.

Importantly, practitioners of the current MBTI® Form M self-scorable assessment have an alternative to online scoring using the proprietary CPP algorithm. For the present research, it was possible to construct four preference clarity category scales from the raw-point data and then use them as nondichotomized interval data. The first step in the transformation was to put a negative sign in front of the raw-point scores for extraversion (E), sensing (S),

thinking (T), and judging (J) or the left side of the dichotomous opposites. This transformation was consistent with the naming polarity of all forms of the MBTI®. For example, a raw-point score of 10 with a preference for extraversion (E) would be scored as -10 on the newly created extraversion (E) scale. A score of 10 with an introversion (I) preference would be +10. The data ranges for these linear transformations are shown in Table 4.

Table 4: Range for Individual Scale Dichotomized Variables

Variable (8 scales)	Raw score total range
Extraversion (E)	(-21)-(0)
Introversion (I)	(0)-(+21)
Sensing (S)	(-26)-(0)
Intuition (N)	(0)-(+26)
Thinking (T)	(-24)-(0)
Feeling (F)	(0)-(+24)
Judging (J)	(-22)-(0)
Perceiving (P)	(0)-(+22)

Note. Each scale (E, I, S, N, T, F, J, P) was considered interval data.

The second step in finding an alternative for the proprietary CPP algorithm was to combine the opposing dichotomous scales (E/I, S/N, T/F, J/P) as shown in Table 5 and then considering the scales as interval data.

The third and final step was to perform simple linear transformation on the four scales to expand the range of each scale to (-30) to (+30). This was accomplished according to the formula (transformation = [raw score] x [30] / [number of items]). The number of items value was 21 or 26 or 24 or 22 depending on the scale. This transformation aligned with the MBTI® standard of (-30) to (+30) for the published preference clarity category. It also made the values among the

four scales easier to compare and contrast within the present study as well as other future studies that elect to use this analytical approach in personality preference research.

Table 5: Range for Combined Scale Nondichotomized Continuous Type Variables

Variable (4 Scales)	Raw score range
E/I	(-21)-(+21)
S/N	(-26)-(+26)
T/F	(-24)-(+24)
J/P	(-22)-(+22)

Note. Each scale (E/I, S/N, T/F, J/ P) was considered interval data.

The methodology was discussed in cooperation with Robert McPeek, Ph.D., Director of Research, Center for Applications of Psychological Type (CAPT) who summarized in saying, "I definitely encourage you to use continuous scores" (personal communication, October 22, 2012) in MBTI® research. This approach, at first, seemed counterintuitive in the study of dichotomous personality type theory that attempts to categorize personality according to prescribed preferences but aligned well with the dynamics of actual human behavior. As a result, a novel perspective to personality type research became part of the present study.

The described practical method of formulating four new continuous type variables necessitated a more in-depth analysis of the raw score data. Multiple regression required normal distribution of the multiple predictor variables while Jung's psychological type theory as embodied in the MBTI® instrument strongly suggested four dichotomous dimensions of personality. Type theory implicitly implied that personality preference data should exhibit a bimodal shape rather than a normal distribution. However, this was not the case in prior research per Bess et al. (2001) who found, "Unfortunately, at least with respect to the traditional

preference-score method of scoring the MBTI®, research has consistently shown that the bimodal score distributions implied by the 'type' view of personality are not typically present in large, unselected populations of examinees" (p. 1). Therefore, the present study that incorporated a relatively small sample size all from the same organization purposely added a step to investigate the normality of the four transformed predictor variables. Additional details are provided later in this chapter.

In addition to the practical approach detailed, there was theoretical support for use of MBTI® interval data that resulted in continuous variables as Roberts, Harlin, and Briers (2007) pointed out:

> Beyond nominal categorization, MBTI Form M scale scores can be treated as ordinal variables (Slight, Moderate, Clear, or Very Clear) based on preference clarity (Myers & Myers, 1998). There is also precedence in the literature for using raw scale scores as interval data in statistical analyses. (pp. 58-59)

Carr (2000) conducted a rigorous examination of the MBTI® Form M structure based on raw-data ranges and concluded that the work of McCrae and Costa (1989) questioned the type theory behind the MBTI® dichotomous categories while providing solid support for using continuous scale scores for research. Crockett and Crawford (1989) provided similar support for using continuous scale scores based on their detailed review of raw data. Edwards et al. (2002) decided on a data analysis strategy that "in this and subsequent analyses a regression strategy was used in which continuously scored variables were standardized . . . to reduce multicollinearity between the lower order and higher order effects" (p. 442). Higgs (2001) used a "procedure, which is generally accepted, for correlating dichotomous with continuous variables . . . [and] it was decided to analyse [sic] the data using point biserial correlations applied to both the individual MBTI® scales and the dominant functions" (p. 525).

In summary, the present study employed four predictor variables which were the four personality continuous type dimensions defined by the MBTI®. Based on both a practical and theoretical approach, there is historical precedence for using interval data transformed from raw-point data for personality research.

SLP-R© and Data Type

Different from the long history of personality preference research based on Jung's analytical psychology type theory using the MBTI® instrument, servant leadership is a relatively recent arrival in the grand arena of leadership studies. Per the historical record described in Chapter 2, the different dimensions of servant leadership were defined via scholarly discovery and there has been general evolutionary agreement regarding the primary identifying constructs. The present study used the SLP-R©, extending extant research regarding the three distinct servant leadership constructs of vision, empowerment, and service.

The SLP-R© began the development process as the Self-Assessment for Servant Leadership Profile (SASLP©). It was modified and became the Servant Leadership Profile (SLP©). In support of assessing instrument validity, Dennis and Winston (2003) "set out to extend the work of Page and Wong's work to determine if their items would reduce to the factors that they originally intended" (p. 455). Principal components factor analysis successfully verified three of the original categories within the overall structure of the instrument—vision, empowerment, and service. The supportive work to assess instrument validity concluded that "this scale represents a potential tool with positive implications for training new and existing leaders" (Dennis & Winston, 2003, p. 456).

In parallel, Wong and Page (2003) continued to refine the SLP© and proposed an opponent-process model that included the two new subscales of abuse of power and egotistic pride. The result was the SLP-R© comprised of seven subscales and 62 randomized items using a 7-point Likert scale to collect self-report data from survey subjects. Numbers indicate the magnitude of difference between the Likert scale items and there is no absolute zero point. The three dependent or criterion variables represented by three dispositional characteristics of servant leadership were continuous variables resulting from interval data. A simple linear transformation on the three scales was performed to expand the range of each scale to (0) through (+100) according to the formula (transformation = [raw score] [100] / [7-point Likert scale] [number of items]). The value for the "number of items"

was dependent on the scale. This transformation made the values among the three scales easier to compare and contrast within the present study.

The present study used the item factor loadings for vision, empowerment, and service provided by Drs. Wong and Page when they gave permission to use the copyrighted SLP-R©. The total item count for the three constructs was 32 or half of the total item count. Survey subjects in the present study responded to all 62 items. However, only the three key attributes of vision, empowerment, and service were used for statistical analyses. A confirmatory factor analysis was beyond the scope of the present study.

Wong and Page (2003) provided the following direction to subjects at the beginning of the SLP-R© survey form instructing:

> Leadership matters a great deal in the success of any organization. This instrument was designed to measure both positive and negative leadership characteristics. Please use the following scale to indicate your agreement or disagreement with each of the statements in describing your own attitudes and practices as a leader. If you have not held any leadership position in an organization, then answer the questions as if you were in a position of authority and responsibility. There are no right or wrong answers. Simply rate each question in terms of what you really believe or normally do in leadership. (p. 1)

According to Wong and Page, positional leadership in a traditional leader–follower relationship is not a requirement for self-assessing servant leadership behaviors. Importantly, this philosophical stance with specific instructional clarification opened the opportunity to assess servant leadership behaviors among those individuals who work together with others yet do not structurally have a leader–follower relationship with them. Additional information is provided in the control variables section of the current chapter.

The present study chose the SLP-R© as the servant leadership assessment instrument because (a) it has achieved significant use in servant leadership studies with Wong and Davey (2007) reporting that the "Servant Leadership Profile—Revised has been used by more than 100 organizations and universities for research and evaluation purposes" (p. 5), (b) it was developed specifically as a self-report tool with data obtained from individual servant leaders, (c) it paralleled the self-

report characteristic of the MBTI®, (d) it aligned with the individual level of analysis for the entire study, and (e) it has benefited from the evolutionary development process with one revision to date and is currently in active use by servant leadership researchers.

Control Variables

The present study employed four control variables to obtain specified demographic and organizational data for analysis. The following four categorical control variables were used to provide better interpretive sense making regarding relationships among the predictor and criterion variables as follows: (a) gender in two categories, (b) age in six categories, (c) time of employment in four categories, and (d) organizational role in two categories. The first three control variables are often used in leadership studies as described in Chapter 2.

The control variable labeled organizational role indicated whether a survey respondent had direct reports in a leader–follower relationship as part of the organizational structure that served as the research setting. This variable was atypical in servant leadership studies and seemed contrary to the traditional definition of a servant leader that implies a formal leader–follower relationship between persons. However, Lewis et al. (2008) pointed out that "any discussion on type and service really needs to emphasize that every single person, whatever their typology, has the potential to be a fantastic servant-leader according to their gifts" (p. 9). More pointedly, Winston (1999) noted that "servant leadership is the desire to see those you work with become all they can be" (p. 76). The key word in this quotation is *with* denoting a horizontal rather than vertical relationship in a typical organizational form. Note also that Leo, the servant in Hesse's (1956) novel that inspired Robert Greenleaf to develop the philosophy of servant leadership, was certainly a leader without direct reports. Finally, Patterson (2003) defined altruism "as helping others just for the sake of helping" (p. 17). Again, the requirement for a leader–follower relationship in Patterson's original model was not specific. Including the control variable of organizational role added interest and value to the study.

Data Analysis Method

Quantitative research concerns itself with testing hypotheses that emerge from theory using empirical data to estimate the size of a phenomenon of interest. The present study incorporated a two phase approach to data analysis using SPSS® Version 20. The first phase of analysis accomplished initial data screening and characterization per statistics found in this chapter. At the outset of Phase 1, the collected data were inspected using descriptive statistics to determine the need for data cleansing prior to further analysis. Minimal data cleansing was required and the minimum sample size of 100 data sets was exceeded by seven (n = 107). The second phase of analysis accomplished hypotheses testing per information provided in Chapter 4.

Participant Demographics

The present study included a total of 107 subjects or 53.5% of the 200 individuals in the sampling frame. Simple descriptive statistics were used to define characteristics of the demographic data represented by the four control variables (see Table 6). Respondents answered the request to become involved in a doctoral level research project via instructions for participation provided to them in an email with embedded video message from a senior member of the sampling frame. Survey packages were provided to voluntary subjects and collected from them by organizational leaders using a proportionate stratified random sampling plan. The convenience sample used for data collection was based on proximity and availability (Creswell, 2003) that supported the limited resources available for the research study.

Table 6: Demographic Comparison of Current Research Sample (n = 107) and the Sampling Frame (N = 200)

Demographics	Statistic	n	N
	Gender		
Male	59	55.1%	29.5%
Female	48	44.9%	24.0%
	Age		
20-30 years	22	20.6%	11.0%
31-40 years	36	33.6%	18.0%
41-50 years	22	20.6%	11.0%
51-60 years	18	16.8%	9.0%
61-70 years	7	6.5%	3.5%
> 70 years	2	1.9%	1.0%
	Employment		
0-3 years	55	51.4%	27.5%
4-6 years	26	24.3%	13.0%
7-9 years	11	10.3%	5.5%
> 9 years	15	14.0%	7.5%
	Organizational role		
Leaders with direct reports	82	76.6%	41.0%
Leaders without direct reports	25	23.4%	12.5%

Note. Gender and organizational role were categorical but treated as dummy variables for statistical analyses. Age and employment were categorical but considered as continuous variables with assigned values for statistical analyses.

A simple count of the four-letter personality preference designations resulting from the MBTI® was performed as a way of assessing variability in the research sample (see Table 7). As a measure of assessing the adequacy of obtaining a representative sample, all 16 possible categories were represented in the sample

size of 107 individuals. The largest number of individuals in any self-reported personality type was 15 representing category ESFJ. The smallest number of individuals in any self-reported personality type was one representing category ISTP.

It was also noted that 68 (63.6%) of the survey respondents had a self-reported preference for extraversion, whereas 39 (36.4%) had a self-reported preference for introversion. These percentages do not match the overall United States statistic of 45-53% of individuals who expressed a preference for extraversion and 47-55% who expressed a preference for introversion (Hammer & Martin, 2003). This difference is of some comparative interest but does not detract from the present study.

Descriptive Statistics

Descriptive statistics are presented for the variables in the subject research including means, standard deviations, and reliability levels (see Table 8). Reliability was defined as a measure of internal consistency and concerned with the need for measurement dependability in social science studies. Formally, reliability is defined as "the relative absence of errors of measurement in a measuring instrument" (Hair et al, 2006, p. 643). Cronbach's alpha was used as the statistic to measure reliability which is the accepted norm in social science research for assessing Likert scales (Cronbach, 1951).

Table 7: Numerical Count of Subject Personality Preferences (*n* = 107)

E/I	S/I	T/F	J/P	MBTI® Code	Number
E	S	T	J	ESTJ	11
E	S	T	P	ESTP	3
E	S	F	J	ESFJ	15
E	S	F	P	ESFP	3
E	N	T	J	ENTJ	8
E	N	T	P	ENTP	2
E	N	F	J	ENFJ	14
E	N	F	P	ENFP	12
I	S	T	J	ISTJ	10
I	S	T	P	ISTP	1
I	S	F	J	ISFJ	8
I	S	F	P	ISFP	3
I	N	T	J	INTJ	4
I	N	T	P	INTP	2
I	N	F	J	INFJ	7
I	N	F	P	INFP	4

Table 8: Descriptive Statistics for Predictor and Criterion Variables

Variable	*N*—Valid	*M*	*SD*	α
E/I	107	-3.24	17.64	—
S/N	107	-.270	17.57	—
T/F	107	2.14	17.01	—
J/P	107	-4.61	17.17	—
Vision	107	84.01	10.12	.64
Empowerment	107	84.59	7.23	.81
Service	107	87.28	7.58	.79

Note: Reliability of the MBTI® was not assessed as part of the present study.

Reliability Assessment

Reliability assessment of the MBTI®, the global standard for the self-report measurement of personality preference, was beyond the scope of the present research. Acceptable reliability and validity have been demonstrated in prior research across many diverse research settings (Schaubhut, Herk, & Thompson, 2009).

A reliability analysis of the SLP-R© was performed on the three multi-item measures used in the subject study—vision, empowerment, and service. According to Table 8, empowerment and service had acceptable Cronbach alphas of .81 and .79 respectively as compared to a social science traditional minimum of .70. However, vision had a Cronbach's alpha of .64 which is less than the traditionally accepted number of .70. The reliability value of .64 was accepted for the present study per a previously defined decision rule that is discussed later in this chapter, and (a) Cronbach's alpha could not be increased by deleting an item in the scale; (b) realizing that Cronbach's alpha was sensitive to low or high total item counts, the number of items in the vision subscale that made up the SLP-R© was < 10% of the total item count of 62 and the lowest item count of all seven subscales; and (c)

the lower reliability was acceptable because the SLP-R© has demonstrated high validity.

Predictor Variable Normality Assessment

As described earlier in this chapter, the present study employed a nontraditional but practical method of transforming MBTI® raw scores from categorical data to interval data for use in formulating multiple regression models. In the process, four new continuous type variables were created and all were tested for normality as a requisite for constructing multiple regression models.

First, a frequency distribution for each transformed predictor variable was visually inspected and compared with a normal distribution overlay. None of the histograms displayed a clearly normal distribution shape indicating some measure of non-normality that required additional consideration to determine adequacy for further analyses.

Second, skewness as the third moment about the arithmetic mean and kurtosis as the fourth moment about the arithmetic mean were visually assessed as a measure of shape. A normal distribution is symmetric and both skewness and kurtosis have values of zero. Regarding skewness, the continuous type variable T/F had a negative value indicating a higher number of scores on the right side of the distribution while the other three predictor variables had a positive value indicating a higher number of scores on the left side of the distribution. However, the skewness values of all four continuous type predictor variables were less than twice their standard error indicating adequate symmetry. All four continuous type predictor variables had negative kurtosis values indicating a flatter shape or tendency towards a non-normal distribution.

Third, diagnostic Q-Q plots were visually inspected as a way of assessing normality that compared the observed sample distribution with the expected value for a normal distribution. All four continuous type predictor variables displayed very slightly "S"-shaped plots with the lower half of the curve above the straight line representing a normal distribution and the upper half of the curve below or on the straight line.

Fourth and lastly, because the above assessments were fundamentally qualitative in nature, the present study quantified non-normality for the four continuous type predictor variables using Kolmogorov-Smirnov tests finding all tests were significant ($p < .001$; see Table 9).

Table 9: Kolmogorov-Smirnov Test of Normality for Continuous Type Variables

Variable (4 Scales)	Kolmogorov-Smirnov
E/I	D (214) = 0.11, p <.001
S/N	D (214) = 0.08, p <.001
T/F	D (214) = 0.10, p <.001
J/P	D (214) = 0.13, p <.001

In spite of the numeric results, the Kolmogorov-Smirnov statistic "doesn't necessarily tell us whether the deviation from normality is enough to bias any statistical procedures that we apply to the data" (Field, 2005, p. 93). Also Field cautioned that with "a large sample (200 or more) it is more important to look at the shape of the distribution visually and to look at the value of the skewness and kurtosis statistics rather than calculate their significance" (p. 72). The subject quantitative results are provided so they are available within the present study as well as for future studies that elect to use this analytical approach in personality preference research.

In summary, per a previously defined decision rule that is presented later in this chapter, the present study acknowledged the need to assess normality of the four continuous type predictor variables and found some degree of non-normality. The decision was made to use the transformed variables in the study based on the rationale that (a) quantitatively, the values of skewness indicated adequate symmetry about the mean; (b) qualitatively, the visual shape of diagnostic Q-Q plots depicted only a very slight "S" shape; and (c) most distributions exhibit some

measure of non-normality, which for the present study were considered acceptable per visual inspection of the distribution shapes per Field (2005).

Hypothesis Testing

After completing the described first phase of data analysis, the second phase of data analysis focused on testing the hypothesized relationships among the research variables detailed at the end of Chapter 2. The statistical method used to perform inferential data analyses was defined by the type of data resulting from use of the two previously described survey instruments in the present study. The preceeding sections in Chapter 3 established that MBTI® raw-data scores were available to assess the clarity or consistency of the self-reported personality preferences and could be transformed into interval data resulting in four continuous predictor variables as follows: (a) IV1—extraversion/introversion (E/I) continuous type, (b) IV2—sensing/intuition (S/N) continuous type, (c) IV3—thinking/feeling (T/F) continuous type, and (d) IV4—judging/perceiving (J/P) continuous type.

The raw scores produced by the SLP-R© instrument were available to assess the degree of the reported servant leadership behaviors. The SLP-R© used a 7 point Likert scale with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The three criterion variables were continuous variables resulting from interval data as follows: (a) DV1—servant leader vision, (b) DV2—servant leader empowerment, and (c) DV3—servant leader service.

The present study selected multiple regression as the primary inferential statistical method based on the following;

1. The availability of quantitative continuous variables that resulted from the linear transformation of data produced by two survey instruments.
2. The basic nature of the MBTI® which measured preferred direction in four dimensions of personality and could be used as a predictor of servant leadership behaviors.
3. The intentional desire to evaluate the strength of particular personality preferences and the strength of certain servant leadership behaviors.
4. The research design that incorporated multiple predictor variables with a single criterion variable as controlled by multiple control variables.

5. The ability of the collected data to meet the analytical assumptions necessary for constructing multiple regression models per detailed information provided in Chapter 4 (Hair et al., 2006; Kerlinger & Lee, 2000; Tabachnick & Fidell, 2007).

Three multiple regression models, one for each criterion variable, were created as the primary inferential statistical method used to test the relationships posited by the different hypotheses defined at the conclusion of Chapter 2. Specifically, a hierarchial or sequential multiple regression technique using forced entry was employed where the researcher determined the order and number of predictor variables that were entered into the model. First, the four control vartiables were entered as a block into the model. The output indicated the amount of variance in the criterion variable that was accounted for by the control or intervening variables. Second, the four continous type predictor variables were entered as a block and the model was rerun. The output revealed the proportion of variance that was not previously explained by the first block of control variables. This process is referred to as partialling out or controlling for the first block of variables. After developing the three regression models used in the study, it was possible to accept or reject the hypothesized relationships based on interpretation of the output from SPSS®.

Decision Rules

The present research used decision rules during the data analysis phase of the study to provide guidance from the discovery of a statistic to a decision or choice about that statistic. Decision rules address standards that are based in theory or provide practical support while interpreting inferential statistical results.

Regarding the assumption of normally distributed data for the four predictor variables as a precursor to performing multiple regression, it was acknowledged that the present study converted dichotomous MBTI® raw score data using simple linear transformation methods into interval data with associated scale construction establishing four new continuous type variables. The evaluation of normal data distribution involved both a visual and quantitative assessment. If the four personality-related scales did not exhibit obvious normality, the degree of non-

normality would be determined using a Kolmogorov-Smirnov test. The present study decided to use the four transformed predictor variables with their identified degree of non-normality based on the rationale that most distributions exhibit some measure of non-normality, which for the present study was considered acceptable per visual inspection of the distribution shapes per Field (2005).

Regarding assessment of reliability in the present study, it was decided to use Cronbach's alpha (α) to evaluate scale internal consistency. Kerlinger and Lee (2000) instructed that "a number of researchers have declared .7 as the cutoff for acceptable and unacceptable reliabilities. There is no evidence to support this arbitrary rule" (p. 662). Nunnally (1978) observed that satisfactory reliability was not about meeting a specific numeric value but more about considering how the measure was used in research. In some cases, a value of .6 may be acceptable while .9 may be unacceptable in other cases. In the present study, reliability values < .7 were accepted and noted as a factor in the study. It was also acknowledged that deleting an item from a scale may create an opportunity to increase reliability. The minimum number of items in a specific scale was set at five for the present study. The present study accepted $\alpha = .64$ for the construct of vision.

Regarding correlation among the research variables, the present study employed Pearson's product–moment correlation coefficient (r) to assess statistical significance. The calculation assumed normal distribution of interval data to achieve robust decision making about the values of r. The determination of effect size based on statistical significance was as follows: (a) $r = .10$ defined a small effect, (b) $r = .30$ defined a medium effect, (c) $r = .50$ defined a large effect, and (d) $r > .80$ defined a very large effect (Berry, 1993; Cohen, 1988). Also, larger effect sizes are not indicative of causation by themselves. The present study realized very large effect sizes based on correlations between and among the four predictor variables.

Regarding the decision to identify and remove an outlier from the data set, the present study decided to remove only extreme outliers which were defined as data points that reside beyond a predetermined fence per the equation ([extreme outlier] = [upper or lower quartile] + [3] x [interquartile]). In the present study, the

presence of outliers was first visually assessed using scatter plots and/or box plots. A simple outlier may appear abnormal compared to the other data but if it does not meet the quantitative definition of an extreme outlier it was retained in the data set (Stevens, 1992). No extreme outliers were identified in the present study.

In summary and regarding regression analysis, it was decided to apply decision rules found in Hair et al. (2006), Kerlinger and Lee (2000), and Tabachnick and Fidell (2007) as follows:

1. Predictors must be quantitative continuous variables.
2. Variance must be non-zero for all variables.
3. Extreme outliers in all variables must be removed prior to analyses.
4. Multicollinearity as assessed by correlation coefficients (r) must be qualitatively and quantitatively assessed with the bivariate correlations between predictor variables < .85.
5. Normality, linearity, and homoscedasticity of residuals must be assessed as a measure of model robustness.
6. F statistics must be at the $p < .05$ level to indicate significance.
7. R^2 values must be comparatively large for predictor variables.
8. Adjusted R^2 values must increase with each step of model construction.
9. Predictor variables must contribute at $p < .05$ to β to signal significance.

If the above decision rules were called into question during data analyses, the deviation was dentified and included as a limitation to the study.

In conclusion, Chapter 3 described the research method used to collect data, assess that data for useability in constructing multiple regression models, and prepare to test the research hypotheses using inferential statistical methods. Chapter 4 describes the results of those statistical analyses. Chapter 5 concludes the present discourse with a discussion of the major results emerging from Chapter 4.

Chapter 4 – Results

Chapter 4 presents variable correlation coefficient and multiple regression results from analyses of the data associated with the study. Multiple regression analyses began with assessment of requisite assumptions followed by formulation of three multiple regression models used to test research hypotheses. The chapter records how the regression models were developed using SPSS® Version 20 and rationale for accepting or rejecting the research hypotheses and concludes with a summary of major findings from the study.

Correlation Between Variables

The present study used the Pearson product–moment correlation coefficient (*r*) to measure the degree of linear relationship between the research variables. The correlation or degree of association between two variables indicates the strength and direction of the associative relationship but does not imply causality. Examination of the data in Table 10 indicated that many of the variables correlated with each other. Correlations were first examined between the predictor and criterion variables, second between the four predictor variables, and third between the three criterion variables.

Regarding correlation between the predictor and criterion variables, the usefulness of the correlation statistic depends on its size and significance noting that: (a) the closer the correlation coefficient is to -1 or +1, the greater the correlation between the variables; and (b) when the correlation is flagged as significant at $r = .05$ level it means there exists ≤ 5% probability that the correlated occurrences result from mere chance. For example, the two variables predictor T/F and criterion vision had a negative, small-effect correlation ($r = -.22$, $p < .05$) per a previously stated decision rule with a common or shared variance of (0.22^2 x 100 = 4.8%). This can be interpreted as 4.8% of the variance in the criterion variable vision was explained by the variance in the predictor variable T/F. Furthermore, this relationship exists with a ≤ 5% probability that the correlated occurrences result from chance. One other statistically significant correlation existed between a predictor and criterion variable. There was a negative, small-effect correlation (*r* =

-.28, $p < .01$) between predictor E/I and criterion empowerment. Noting that the correlation values were both negative, that correlation is bidirectional, and the effect sizes were both small, interpretation of the statistic implying causality or no causality must be based on considerations external to statistical correlation.

Regarding correlation between certain of the four personality-based predictor variables, inspection of the correlation coefficients in Table 10 revealed large ($r = .5$) and very large ($r = .8$) size effects. For example, the predictor variable J/P had positive large correlations with the predictor E/I ($r = .71$, $p < .01$), the predictor S/N ($r = 80$, $p < .01$), and the predictor T/F ($r = 81$, $p < .01$). The common or shared variance of (0.81^2 x 100 = 66%) between predictor J/P and predictor T/F explained 66% of the variance between the two variables with a ≤ 1% probability that the correlated occurrences result from chance. Large-size effects between variables call into question the independence of variables and their construct validity. Perhaps high correlation between different dimensions of dynamic, homogenous human personality is unavoidable. Additional information is discussed in Chapter 5.

Regarding correlation between certain of the three behavior-based criterion variables, inspection of the correlation coefficients in Table 10 revealed two large size positive effects between empowerment and vision ($r = .49$, $p < .01$) as well as between service and empowerment ($r = .57$, $p < .01$). Also there was a medium-size positive effect between service and empowerment ($r = .26$, $p < .01$). Large-size effects between variables in the study of leadership behaviors prompt ongoing assessment of construct validity. Additional information is discussed in Chapter 5.

Table 10: Means, Standard Deviations, and Correlations Among Predictor and Criterion Variables (n = 107)

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. E/I	-3.24	17.64	—						
2. S/N	-0.27	17.57	.68**	—					
3. T/F	2.14	17.01	.72**	.82**	—				
4. J/P	-4.61	17.17	.71**	.80**	.81**	—			
5. Vision	84.01	10.12	-.13	.18	-.22*	-.05	—		
6. Empowerment	84.59	7.23	-.28**	.10	.07	-.14	.49**	—	
7. Service	87.28	7.58	-.08	-.19	.04	-.10	.26**	.57**	—

*$p < .05$. **$p < .01$, two-tailed.

Multiple Regression Analyses

Multiple regression is a general statistical technique used to investigate relationships between one criterion variable and more than one predictor variable. The present study employed three multiple regression models as the primary inferential statistical method to test the hypothesized relationships between the four independent or predictor variables and the three outcome or criterion variables as controlled by four control or intervening variables. Multiple regression required that certain assumptions about specific data characteristics were met prior to model formulation (Hair et al., 2006; Kerlinger & Lee, 2000; Tabachnick & Fidell, 2007). These assumptions were checked prior to performing any analyses to assure that regression models were capable of quantifying relationships and predicting outcomes using values of the associated predictors as follows:

1. Regarding the necessity of quantitative predictor variables, it was determined that the four personality-based variables were properly converted from categorical data to continuous type interval data using a novel linear transformation and scale construction method.
2. Regarding the necessity of non-zero variance, all research variables were assessed to determine the average amount that the numerical scores varied from the mean and it was adjudged that the data had adequate spread.
3. Regarding the absence of outliers among the predictor and criterion variables, histograms or frequency plots were visually evaluated for extreme outliers and none were found that required removal per a previously defined decision rule. There was one outlier identified in the criterion variable service that was not removed because it did not meet the definition of an extreme outlier thus requiring removal.
4. Regarding the absence of multicollinearity, the previously reported correlation coefficients for the predictor variables were as high as $r = .8$ and were defined as having very large effect. Berry (1993) reported that standard errors of the regression coefficients are doubled at $r = .9$.

Multicollinearity was identified as a factor in the present study and is discussed in Chapter 5.

5. Regarding normality, linearity, and homoscedasticity of residuals after model construction, a simultaneous assessment of all three characteristics was performed using a graphical analysis of residuals. The visually assessed scatterplots indicated residual data points were randomly and evenly dispersed throughout the graphic.

In summary, all assumptions for using multiple regression were met while raising a question regarding high values of *r* that presented some degree of multicollinearity.

It was concluded that performing multiple regression analyses on the aggregated and examined survey data would result in a model that was capable of drawing conclusions about the sampling frame based on the sample. Tabachnick and Fidell (2007) informed that generally "regression techniques can be applied to a data set in which the IVs are correlated with one another and the DV to varying degrees" (p. 117) which is the case in the present study.

Regression Statistics

Regression analyses focused on model construction using predictor variables capable of predicting outcomes in criterion variables. The process involved interpretation of the following statistics:

1. *B* or β (beta) statistics are used to express the strength and the direction of the linear association between the single criterion variable and multiple predictor variables. The strength or weight is defined by the standardized and unstandardized partial regression coefficients. The direction of the association is defined by the sign preceding the value of the coefficient. Standardized coefficients (β) have a range of +/- 1 and can be interpreted as the effect of a change in the criterion variable when there is a change in the predictor variable of one standard deviation. Unstandardized coefficients (B) can assume values < 1 or > 1 as a measure of the actual strength of the associative relationship and are necessary in constructing the actual regression equation. When values of the predictor variables are

known, the unstandardized coefficients enable prediction of the criterion variable.

2. R^2 and adjusted R^2 (coefficient of determination) statistics are used to express how much variability in the outcome variable is accounted for by the predictor variables. The adjusted R^2 is an indicator of the generalizability of the model and the difference between R^2 and adjusted R^2 or shrinkage is preferably small. Specifically, the difference can be interpreted as the change in explained variance if the model was derived from the sampling frame rather than a sample.
3. *F* ratio statistics are used to assess the statistical significance of R^2 or how well the model fits the data. Similar to an ANOVA, the *F* ratio in multiple regression indicates the improvement in prediction that occurs from fitting the model compared to the error or inaccuracy that remains in the model. Associated with *F* ratio is the degrees of freedom statistic that indicates the number of different analyzed models. Significance is normally set at .05 or a 5% probability that evaluated differences are the result of mere chance.

Hypothesis Testing — Hypothesis 1

As stated at the conclusion of Chapter 2, Hypothesis 1 posited a relationship between the criterion variable of servant leadership vision and four personality-related predictor variables as follows:

H_1: There is a positive relationship between a self-reported servant leadership characteristic of vision and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

Hypothesis testing was performed per a structured process that determined whether the regression model could be generalized or if it was valid, and concluded with rationale for accepting or rejecting the posited relationships. Hierarchial forced entry regression was used to enter two blocks of variables. In Step 1, the model was run with the four control variables and assessed to determine how well the predictive model fit the data. The first model with only the four control variables demonstrated overall significance and a fit model, F (4, 102) = 5.25, p = .00 < .05. The block of predictor variables collectively accounted for R^2 = 17.1% of the variance in the outcome variable of vision.

During Step 2, the model retained the four control variables and added the four personality related predictor variables. The second model was weaker than the first, F (8, 98) = 3.64, p = .00 < .05, as indicated by the decrease in the F ratio although the overall model was still significant. However, the ΔR^2 = .06 was minimal and nonsignificant at p = .13 > .05.

Therefore, H_1 was rejected based on the inability of the two-step process to demonstrate a fit model capable of predicting servant leadership vision from the four personality based predictor variables while controlling for the four control variables.

Hypothesis Testing — Hypothesis 2

As stated at the conclusion of Chapter 2, Hypothesis 2 posited a relationship between the criterion variable of servant leadership empowerment and four personality-related predictor variables as follows:

H_2: There is a positive relationship between a self-reported servant leadership characteristic of empowerment and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for

the control variables of gender, age, time of employment, and organizational role.

Hypothesis testing was performed per a structured process that determined whether the regression model could be generalized or if it was valid, and concluded with rationale for accepting or rejecting the posited relationships. Hierarchial forced entry regression was used to enter two blocks of variables. In Step 1, the model was run with the four control variables and assessed to determine how well the predictive model fit the data. The first model with only the four control variables demonstrated overall significance and a fit model, F (4, 97) = 2.91, p = .03 < .05. The block of predictor variables collectively accounted for R^2 = 10.7% of the variance in the outcome variable of empowerment.

During Step 2, the model retained the four control variables and added the four personality-related predictor variables. The second model was more robust than the first, presenting a fit model, F (8, 93) = 3.22, p = .00 < .05, as indicated by the increase in the F ratio. The two blocks of predictor variables collectively accounted for R^2 = 21.7% of the variance in the outcome variable of empowerment. The ΔR^2 = .10 was significant at p = .02 < .05. The improvement in r was signaled by the increase in F. The F ratio, or the improvement in prediction, that resulted from fitting the model relative to the inaccuracy that still existed in the model, increased indicating the second model was more significant than the first model.

Correlations between variables were reviewed and predictor E/I had a significant, small effect correlation with empowerment (r = -.28, p < .05). The following predictor variables had nonsignificant, small-effect correlations with empowerment: predictor S/N (r = .10, p > .05), predictor T/F (r = .07, p > .05), and predictor J/P (r = -.14, p > .05). Multicollinearity did not present itself as a problem.

Standardized beta coefficients (β) were reviewed and two of the four predictor variables had nonsignificant positive values: predictor S/N (β = .06, p > .05) and predictor T/F (β = .05, p > .05). The unstandardized coefficients associated with these variables indicated they were not influential in the regression equation. Standardized beta coefficients (β) were reviewed for the other two predictor

variables and had significant, negative values: predictor E/I (β = -.28, $p < .05$) and predictor J/P (β = -.21, $p > .05$). The unstandardized coefficients associated with these variables indicated they were more influential in the regression equation. Table 11 provides specific results of these regression analyses.

Table 11: Hierarchical Regression Analysis for Dimensions of Personality Preference on Servant Leadership Empowerment (n = 102)

Variable	*B*	*SE B*	β
Step 1			
(Constant)	80.457	1.993	—
Gender	-.598	1.394	-.041
Age	1.135	.563	.200
Employment	1.022	.679	.153
Organizational role	-2.327	1.692	-.135
Step 2			
(Constant)	73.633	3.269	—
Gender	-.275	1.460	-.019
Age	1.388	.550	.245
Employment	.873	.661	.130
Organizational role	-1.205	1.775	-.070
E/I continuous type	-.214	.075	-.280*
S/N continuous type	.050	.087	.064
T/F continuous type	.048	.095	.053
J/P continuous type	-.183*	.083	-.210*

Note. $R^2 = .107$ for Step 1 ($p < .05$); $\Delta R^2 = .149$ for Step 2 ($p < .05$).

*$p < .05$.

The final stage of analysis checked the assumptions of the overall Step 2 model. A histogram of regression standardized residuals displayed a near normal shape. A normal P-P plot of regression standardized residuals displayed points close to the expected line. A scatterplot of standardized residuals vs. predicted values displayed a randomly and evenly dispersed pattern. Visual inspection of the plotted data revealed no concerns with the model.

Therefore, H_2 was accepted based on the ability of the two-step process to demonstrate a fit model capable of predicting servant leadership empowerment from the four personality-based predictor variables while controlling for the four control variables.

In conclusion, the regression model presented to be accurate for the sample in the research study and generalizable to the sample frame.

Hypothesis Testing — Hypothesis 3

As stated at the conclusion of Chapter 2, Hypothesis 3 posited a relationship between the criterion variable of servant leadership service and four personality predictor variables as follows:

H_3: There is a positive relationship between a self-reported servant leadership characteristic of service and (a) a self-reported personality preference for the continuous type extraversion/introversion (E/I), (b) a self-reported personality preference for the continuous type sensing/intuition (S/N), (c) a self-reported personality preference for the continuous type thinking/feeling (T/F), and (d) a self-reported personality preference for the continuous type judging/perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role

Hypothesis testing was performed per a structured process that determined whether the regression model could be generalized or if it was valid, and concluded with rationale for accepting or rejecting the posited relationships. Hierarchial forced entry regression was used to enter two blocks of variables. In Step 1, the model was run with the four control variables and assessed to determine how well the predictive model fit the data. The first model with only the four control

variables demonstrated an unfit model, F (4, 102) = 1.78, p = .14 > .05. The block of predictor variables collectively accounted for R^2 = 6.5% of the variance in the outcome variable of service.

During Step 2, the model retained the four control variables and added the four personality-related predictor variables. The second model was weaker than the first, F (8, 98) = 1.47, p = .18 > .05, as indicated by the decrease in the F ratio and the overall model remained nonsignificant. The ΔR^2 = 10.7% was minimal and nonsignificant at p = .34 > .05.

Therefore, H_3 was rejected based on the inability of the two-step process to demonstrate a fit model capable of predicting servant leadership service from the four personality-based predictor variables while controlling for the four control variables.

Summary of the Major Findings

Major findings from the present study emerged during hypotheses testing using multiple regression analyses and are discussed in more detail in Chapter 5.

First, it was possible to transform dichotomous Myers Briggs Type Indicator (MBTI®) personality preference raw score data into interval data using acceptable methods of linear transformation and scale construction that resulted in a data set that met the required analytical assumptions to perform multiple regression analyses. The use of MBTI® raw score data obtained from members of the sampling frame rather than reliance on generalized personality preference clarity categories added depth to the present study.

Second, an unfit regression model resulted from data analyses that tested the relationship between servant leadership vision and the four dimensions of personality preference as controlled by four control variables. Vision was represented by one of the subscales in the SLP-R©. Descriptive data analysis indicated a Cronbach's alpha of .64 which was less than the traditionally accepted value of .70. A large effect correlation coefficient was noted between vision and empowerment (r = .49, p < .01). Causal reasons for the unfit model were not

apparent in reviewing the data. However, there are some qualitative factors of interest that are discussed in Chapter 5.

Third, a fit regression model resulted from data analyses that tested the relationship between servant leadership empowerment and the four dimensions of personality preference as controlled by four control variables. Empowerment was represented by one of the subscales in the SLP-R© with a Cronbach's alpha of .81 which exceeded the traditionally accepted value of .70. Regarding correlation coefficients, two large size positive effects were noted between empowerment and vision ($r = .49$, $p < .01$) as well as between empowerment and service ($r = .57$, $p < .01$). The Step 2 regression model accounted for 21.7% of the variance in the outcome variable of empowerment. This was not an exceptionally large number, but the analyses produced an overall fit model.

Fourth, an unfit regression model resulted from data analyses that tested the relationship between servant leadership service and the four dimensions of personality preference as controlled by four control variables. Sevice was represented by one of the subscales in the SLP-R© with a Cronbach's alpha of .79 which is more than the traditionally accepted value of .70. A large effect size correlation coefficient was noted between service and empowerment ($r = .57$, $p < .01$) and a medium effect size correlation coefficient was noted between service and vision ($r = .26$). Causal reasons for the unfit model were not apparent in reviewing the data.

Chapter 4 presented results of the inferential statistical analyses performed on the data collected during the study. Chapter 5 concludes the subject discourse with a discussion about the results.

Chapter 5 – Discussion

Chapter 5 examines the results presented in Chapter 4, provides interpretive comment regarding the outcome of testing the research hypotheses, clarifies the limitations noted in the present study, and proposes suggestions for future study. Of particular interest is a discussion about shaping the definition of the attributes of servant leadership to purposely account for both vertical and horizontal structural relationships between and among individuals.

As a reminder, the principal purpose of the presented study was to explore the intersection between Jungian analytical psychology formulated in personality type theory and Greenleaf's (1977) philosophy of servant leadership, specifically looking at the characteristics of vision, empowerment, and service. This intersection was qualitatively highlighted in the statement, "I think Jung used a lot more obscure and mystical language, but ultimately, at the core, I think that there is a degree of overlap between Jung and Greenleaf" (Lewis et al., 2008, p. 14). The presented study was postulated on the importance of the leader's personality preferences in formulating personal leadership behaviors.

Support and Nonsupport of Hypotheses

Chapter 3 defined the research methodology used in the present study pointing out how the aggregated quantitative data was treated and linearly transformed prior to performing inferential statistical testing. Multiple regression models were constructed only after assuring that requisite assumptions were met, enabling the chosen statistical method. Chapter 4 reported on the results of inferential statistical analyses. Jung (1958) was mindful of statistical processes, cautioning that analytical results show the "facts in the light of the ideal average but does not give us a picture of their empirical reality. While reflecting an indisputable aspect of reality, it can falsify the actual truth in a most misleading way" (p. 8). Acknowledging Jung's prudent counsel, the results presented in Chapter 4 are discussed in this section.

Criterion Variable of Vision—Hypothesis 1

H_1 was rejected based on an unfit two-step regression model that was incapable of predicting servant leadership vision from the four personality-based predictor variables while controlling for the four control variables. Yet vision is a central element of the definition of a leader adopted in the present study where "a leader is a person who sees a vision, takes action toward the vision, and mobilizes others to become partners in pursuing change" (Laub, 2004, p. 4). Vision is an essential element in all forms of effective leadership (Blanchard, 1995) and may be one of the oldest ideas linked to leadership (Senge, 2006).

Likewise, vision is a key element of servant leadership. Russell (2000) selected vision as one of the functional attributes of servant leadership and noted that it "involves foresight and conceptualization" (p. 9). But the definition of servant leadership vision goes beyond organizational considerations to the individual member of the organization. Vision as applied to servant leadership means seeing individuals as viable and worthy and determining how to help the person achieve their full potential (Patterson, 2003) regardless of their personality preferences on their personal journey towards individuation. As a result, servant leadership vision has the potential for a better appreciation of individual personality differences that can be linked to personality types.

Personal vision emerges from within the leader and achieves clarity when associated with purpose (Senge, 2006). Purpose is more abstract than a visceral vision that has the power to foster specific actions aimed at achieveing a desired conclusion. The present is a slightly uncomfortable place to remain when a vision is pulling a person into the future. The accomplishment of a personal vision normally requires support from others and willing participation in achieving specific objectives. Therefore, a servant leader seeking the good of others must be able to communicate a futuristic vision involving individual people because the "servant aspect of leadership only begins when vision, direction, and goals are clear" (Blanchard, 1995, p. 12).

Vision continues as an essential component of leadership, so the question remains concerning the reason or reasons for the unfit regression model. Recalling

the counsel of Jung regarding statistical methods, there is some informed conjecture available here for qualitative sense making. There may be some influence from the control variable organizational role where 23.4% of the sample did not have direct reports per the structural framework of the research setting. Personnel without direct reports may have a good understanding of organizational vision and benefit from supportive coworkers, but their organizational role does not require them to personally articulate that vision on a regular basis. It could also be that organizational vision in the research setting of a very large megachurch is dynamic enough that it is not always crystal clear to all personality types which suggest an area of opportunity for improved servant leadership practice.

Criterion Variable of Empowerment—Hypothesis 2

H_2 was accepted based on a fit regression model that resulted from data analyses that tested the relationship between servant leadership empowerment and the four dimensions of personality preference as controlled by four control variables. Empowerment holds a prominent place in characterizing servant leadership behaviors and Greenleaf was called the "father of the empowerment movement" (Buchen, 1998, p. 132). There is no servant leadership without the sharing of power. Patterson (2003) informed that "empowering people, with the best interest of those served in mind, is at the heart of servant leadership" (p. 23).

The word empowerment is explicit in its meaning that one person has more power than another person and as a servant leader is willing to share it. The five primary bases of social power were identified by French and Raven (1959) as reward, coercive, legitimate, referent, and expert. The terms describe a relationship where (a) reward power is a person's belief that another person can compensate or reward them; (b) coercive power is a person's belief that another person has the ability to punish them; (c) legitimate power is a person's belief that another person has the authority to make decisions and demands; (d) referent power is a person's respect for, identification with, or attraction to another person as a source of influence; and (e) expert power is a person's recognition that another person possesses greater knowledge and expertise.

Patterson's (2003) progressive model of servant leadership placed the characteristic of empowerment after vision. In this regard, the servant leader maps out a vision that they communicate clearly but persuasively with others and then shares power with them to achieve that vision maintaining the heart of a servant toward them all the while. The question arises regarding the nature and degree of power that a servant leader is willing to share with another person. Reward power and coercive power are positional forms of power. Legitimate, referent, and expert power are relational forms of power that could be shared through mentoring or leadership development experiences. Empowerment is defined as "the act of strengthening an individual's beliefs in his or her sense of effectiveness . . . [and] is not simply a set of external actions; it is a process of changing the internal beliefs of people" (Conger, 1989, p. 18). In practical terms, empowerment involves giving people the responsibility and authority for decisions that affect them. It fosters teaming arrangements that increase the speed of decision making, enables people to partner freely with others, and promotes personal and group creativity. Patterson (2003) instructed that the servant leader "empowers followers to find their own path, and they, in turn, are inspired to help others find their best paths" (p. 24).

In the present research, the two-step regression model accounted for 21.7% of the variance in the outcome variable of empowerment. This was not an exceptionally large number but adjusted R^2 values increased by 10% between Step 1 and Step 2 model testing as a mark of an overall fit model. There were three variables of significance ($p < .05$) in the model. The first was control variable age. Intuitively age indicates that individuals with greater accumulated life experiences are more prone to empowerment behaviors.

The second and third variables of significance ($p < .05$) were predictor variables E/I and J/P. The predictor variable E/I was defined by Jung (1921) as a basic attitude that dichotomously categorizes all individuals. It indicates the direction or flow of psychic energy within an individual. Extraversion is marked by the desire to affect a situation rather than be affected by it, whereas introversion is marked by the desire to understand how they are affected by a situation rather than to affect it. The predictor variable J/P defines the orientation of the personality to

the outer world. Perceiving is the way the mind receives information and judging is the way decisions are made regarding that information. This dimension of personality was not part of Jung's original personality type theory composed of two opposing attitudes and four opposing functions. Myers and Briggs (Myers et al., 2003) added the J/P dimension as a way of further categorizing personality type. Perceiving was named to identify the intuition/sensing function pair and judging was named to identify the feeling/thinking function pair.

The E/I and J/P predictor variables were significant in the regression model and those dimensions of personality are also fundamental to the Myers Briggs Type Indicator (MBTI®) four-letter personality preference description. Large and very large correlation coefficients were noted between the four predictor variables suggesting that high correlation between different dimensions of dynamic, homogenous human personality is unavoidable. However, high correlation alone does not indicate a direct cause-and-effect relationship. It may indicate a need for more sensitive instruments to measure the different nuances of human personality. In conclusion, the relatively low value of total explained variance (21.7%) in the outcome variable indicated there are other factors shaping the relationship between personality preference and empowerment. This is an opportunity for future study.

Criterion Variable of Service—Hypothesis 3

H_3 was rejected based on an unfit two-step regression model that was incapable of predicting servant leadership service from the four personality-based predictor variables while controlling for the four control variables. Yet Patterson's (2003) servant leadership model depicts a progression of behavioral characteristics that begins with *agapao* love and culminates in service. Service is the final outcome or cumulative impact of all the other behavioral attributes. The word service defines one part of the dichotomous label servant leader. The importance of service as a defining characteristic of servant leadership was pointed out initially by Greenleaf (1977) and early in scholarly research (Farling et al., 1999). Yet the notion of service is still unfamiliar to many as noted by Senge (2006) where "society places some emphasis on our personal desires . . . and relatively little on our desires to serve. In fact, it is easy to feel naïve or foolish by expressing a desire

to make a contribution" (p. 139). This is not true of the servant leader. Martin Luther King, Jr. (1968) encouraged others to seek greatness but to do so through service and love; the end and the beginning of Patterson's model of servant leadership.

Considering service as the ultimate aim of servant leadership, the question remains concerning the inability of the present model to predict service from the four predictor and four control variables. Interestingly, the core value of servant leadership is espoused in the functional practice of the research setting employed in the present study. Two potentially explanatory observations were made regarding correlation between variables and construct definition.

First, in Patterson's (2003) servant leadership model there is a progression of behavioral characteristics that culminates in vision leading to empowerment and empowerment leading to service. In the present study, there was a large effect correlation coefficient noted between vision and empowerment ($r = .49$, $p < .01$), followed by an even larger correlation coefficient between empowerment and service ($r = .57$, $p < .01$). Satisfactory reliability statistics were noted for empowerment ($r = .81$) and service ($r = .79$). Relatively high correlation alone does not necessarily imply causation but it does offer an opportunity to think about ongoing and evolutionary construct definition. Second, the definition of service may need to be reconsidered as it is operationalized and understood by survey subjects recalling that Focht's (2011) latest list of servant leadership characteristics includes two items regarding service. The question is asked relative to the subject research setting whether survey subjects answered according to service rendered at the organizational level or service rendered at the individual level. Perhaps this unanswered question explains the unfit regression model constructed to test H_3.

Thoughts Concerning Predictor and Criterion Variables

The present empirical study is among the first to investigate relationships between Jung's (1921) personality type theory as embodied in the MBTI® and Greenleaf's (1977) servant leadership style as represented by the behavioral

characteristics of vision, empowerment, and service. This section captures some thoughts about this intersection of research interests.

Jung's Personality Type Theory

Personality refers to the "unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (both overt and covert) across different situations and over time" ("Personality Type," n.d.). Appealing to trait theory, every person is distinct with varying degrees of different psychological traits. Individual uniqueness "lies in the relative importance of the various personality forces in determining his behavior and in the relative magnitude of these traits in comparison with other persons" (Forer, 1949, p. 118). However, Jung (1921) posited that people could be classified into distinct groups according to their particular personality preferences. This dichotomous division that asked *what kind* was in opposition to trait theory that asked *how much*. Different theories suggest that personality is either dynamic and/or relatively stable.

The present study accepted the premise of Jungian type theory and the ability to categorize personality differences collecting self-reported personality preference data in the form of numerical scores using the MBTI®. Rather than a correlational approach, the study employed a multiple regression methodology using linearly transformed raw score data from the MBTI® to develop four continuous scales. This approach did not substantiate a theorized sharply bimodal distribution of the four dichotomous dimensions of personality as suggested by Jungian personality type theory. Encouragement to advance personality research using continuous scores came from Robert McPeek, Ph.D., director of research at the Center for Applications of Psychological Type (CAPT). As a result, a novel perspective to personality type studies became part of the present research and this method is available for further development and enhancements by other researchers.

Large-effect correlation coefficients (r = .7 - .8, $p < .01$) were noted between the four predictor variables representing personality preference. This reality speaks to human personality being homogenous yet dynamic and difficult to separate into

distinct categories. There remains much to learn about using raw score data to interpret personality nuances.

Greenleaf's Servant Leadership Style

Servant leadership is a philosophy or style of leadership posited by Greenleaf (1977) that has achieved relatively recent recognition in the grand arena of leadership studies. It is characterized by the notion that a person has the heart and desire for service for others prior to aspiring to leadership. In this sense, servant leadership appeals to a trait theory of personality suggesting that a person can develop leadership skills over time through growing self-awareness and a life-long journey of individuation. Conversely, servant leadership appeals to a type theory of personality aligning with a "new construct labeled leadership coherence, which refers to the notion that a leader's behavior fluctuates in a consistent, reliable, and predictable idiographic manner across situations" (Michel & LeBreton, 2011, p. 688).

In either case, leaders exert influence in both vertical and horizontal relationships with others as part of organizational structures. Servant leadership has traditionally been described as a vertical relationship between leaders and followers, yet is acknowledged and observed to exist horizontally in organizations. For example, effective teams are led by servant leaders who empower others to share leadership roles in a distributed manner depending on the situation. The practice of leadership in these environments takes on a distributed form shaped by interactions among people more than the actions of an individual leader (Spillane, 2006).

Unquestionably, organizations need leaders to invoke change to reach mutual goals and objectives. But sometimes it is difficult to identify the leader in contemporary organizations with short-term virtual teams who may never see each other to interact face to face, in teaming relationships with complex contracting arrangements, in entrepreneurial ventures that require unique or specific skill sets, and in rapidly changing organizations due to mergers and structural changes.

Acknowledging this reality provides an opportunity to rethink the current constructs of servant leadership. Do the available instruments that measure servant

leadership behaviors, including the Servant Leadership Profile-Revised (SLP-R©), account for assessment of these characteristics in both vertical and horizontal directions? Are there new and evolved leadership models that await development differentiating between vertical and horizontal aspects of servant leadership? These questions emerged from the present study.

Leadership Development Tool

Anticipated outcomes of the present study included advancement of the understanding of servant leadership as a leadership style that is valid and appropriate in modern organizations, as well as providing the person of the servant leader a tool to use in the practice and practical application of servant leadership. Mapping personality preference using the MBTI® to the specific servant leadership characteristics of vision, empowerment, and service allows the leader insight and perspectives into their own leadership style as a way of sharpening both personal and organizational influence.

Jung (1921) set the goal of individuation as the achievement of a full personality that could only be achieved via a lifetime of discovery. Bennis (2003) affirmed that "becoming a leader is synonymous with becoming yourself. It is precisely that simple, and it is also that difficult" (p. xxxiii). Again Bennis emphasized that "letting the self emerge is the essential task of leaders" (p. 105). The life-long journey and challenge for servant leaders is to know themselves first as a servant and then aspire to leadership becoming more servant-like as they serve others.

The present research provides a methodology for individuals and organizations to use in leadership development environments that couples leader self-reported personality preference with self-reported measures of servant leadership vision, empowerment, and service. At the individual level, leaders learn about their own personality preferences as a way of increasing their level of self-awareness and, at the organizational level, leaders learn how to appreciate and develop relationships with the diversity of personalities in their organizations.

A servant leadership workshop or development program emerges from the present completed study that couples the themes of enhanced self-awareness, personality type discovery and training, and self-assessment of servant leadership practice. Per adult learning theory (Brookfield & Preskill, 2005), classroom or group training would be followed by experiential learning in a real-world teaming environment. The training would incorporate the three themes per Jensen (2011) as the "1) capacity for perspective taking, 2) clarity regarding leadership style, and 3) awareness of discrepancies between espoused values and actual behavior" (p. 31). The development program would conclude with a time of private reflective learning followed by periodic reinforcement over time.

Potential Limitations

The present empirical study was planned and performed according to a well-thought-out series of events but experienced limitations as described in this section.

Method and Instrumentation

A novel approach to MBTI® raw score data analyses was employed in the study to convert categorical data into continuous data for use in constructing three multiple regression models for hypotheses testing. The simple linear transformation technique used for data conversion did not negatively alter the characteristic of the raw scores and analytical tests confirmed the requisite assumptions prior to performing multiple regression. The potential limitation lies in the reality that the employed method was not the only way to perform raw score data conversion prior to conducting multiple regression. The use of MBTI® raw scores for personality research was encouraged and offers the potential for ongoing use in studying the personality of servant leaders.

There was also a potential limitation regarding the use of the SLP-R© and restricting the present study to assessment of only the behavioral characteristics of vision, empowerment, and service. A robust case was made for the decision to use only these three characteristics, but additional learning may have been available

using all seven subscales in the SLP-R©. The present study was bounded by the normal constraints of time and other human resources.

Research Subjects

This study employed a psychodynamic approach with a sharp focus on the personality type of the leader using objective rather than subjective survey instruments. An assumption was made that personality is accessible and can be measured through a self-report process. The limitation in this well-practiced research design is the actual survey subject and their degree of self-awareness regarding their own personality and the answers they provide to each question. A person with a relatively low degree of self-awareness may not provide accurate descriptions of their own behavior.

Similarly, the question of respondent consistency asks if a person behaves the same way in different situations or at least if a person's behavior is predictable in different environments such as work and/or at home. Research subjects were aware that the focus of the research was personality type and servant leadership and this awareness may have influenced their responses.

Research Setting

The present study, for the first time, took the well-established MBTI® based in Jung's (1921) typology of personality and empirically looked at servant leadership behaviors in a very large megachurch environment. The research setting was intentionally selected because leadership is understudied in this unique setting. Perhaps this uniqueness limits the generalizability of the study to other areas. The MBTI® and the SLP-R© are portable instruments and have been used successfully in many diverse research contexts. Coupling the instruments in the context of a very large megachurch may have introduced some limitations that can be resolved via future research studies.

Future Research Opportunities

The present study raises some important issues and questions while simultaneously providing opportunities for future research. Servant leadership is currently a well-respected research theme and capable scholars are investigating its

"place at the table" of leadership studies. Much has been written qualitatively and quantitatively about the definition of servant leadership. The specific constructs defining servant leadership have been dialogued and critiqued with much enthusiasm. Yet there is more to do before a parsimonious set of attributes has achieved broad agreement. Albert (1998) observed that "one should not expect to define the construct and agree on its measurement except after a long process of empirical inquiry and questioning" (p. 3).

First, there is an opportunity to explore the definition of servant leadership regarding both vertical and horizontal relationships in various organizational settings. Intuitively, they are different. Contemporary organizations are less encumbered by spatial and temporal considerations than at any time in the past. Complex tasks are performed by teams composed of people in the same location, in the next building, in another part of the U.S., and around the world, each with their own sense of *now*. Modern technologies enhance communication processes yet challenge their effective use in complex real-time decision making. Leadership in these environments is an understudied opportunity calling for self-aware servant leaders to model and implement a clear understanding of the practical nature of servant leadership.

Second, there is an opportunity to evaluate and perhaps modify the constructs defining a better understanding of servant leadership. The three constructs of vision, empowerment, and service employed in the present study are very important since they appeared early in different models of servant leadership and remain in current models. They progressively emerge from prior constructs in Patterson's (2003) model and as a result are perhaps more evolutionary in their definition.

Third, there is an opportunity to further investigate the established relationship between dimensions of personality preference and empowerment as indicated in this study. The total explained variance (21.7%) in the outcome variable indicated there are other factors influencing this relationship. There may be a need for more sensitive instruments to measure the different nuances of human personality.

Fourth, there is an opportunity to compare and contrast servant leadership with other forms of leadership such as authentic leadership. Authentic leadership includes the four components of self-awareness, balanced processing, relational transparency, and an internalized moral or ethical perspective (Klenke, 2007; Walumbwa et al., 2008). Self-awareness is highly correlated with principles of servant leadership as the leader is self-motivated by *agapao* love to serve others as a first priority. B. George (2003) posited that "authentic leaders genuinely desire to serve others through their leadership. They are more interested in empowering the people they lead to make a difference than they are in power, money, or prestige for themselves" (p. 12). Again, the desire to serve and empower are directly related to servant leadership. Bass and Steidlmeier (1999) noted authentic leadership and servant leadership "include either explicit or implicit recognition of leader self-awareness and the focus on integrity, trust, courage, and hope" (p. 71). Vogelgesang, Clapp-Smith, and Palmer (2009) looked at authentic leadership from a cross-cultural perspective and reasoned that because of its moral and ethical basis, authentic leaders have the capacity for "maintaining moral integrity in a manner that remains authentic to their personal values and aligns with the cultural norms and values of the host-country culture" (p. 103).

Fifth, there is an opportunity to consider instrumentation capable of measuring both vertical and horizontal aspects of servant leadership. Not only are leader–follower relationships important, but also "side-by-side" aspects of servant leadership are essential as part of effective teaming arrangements. In this regard, perhaps qualitative or blended research designs would be a good option prior to or following empirical studies.

Sixth, there is an opportunity for ongoing research regarding the personality preferences of servant leaders using MBTI® raw score data. This method has the potential to improve self-awareness as part of more robust leadership development programs. In addition, Waddell (2006) qualitatively suggested that servant leaders have a personality preference for introversion rather than extraversion but the present study did not confirm this hypothesis in the selected research setting. There

is ample opportunity to pursue this proposition as a key element of servant leadership development programs.

Seventh, there is an opportunity for coupling servant leadership and personality type research using multi-rater or 360 degree feedback from a leader's subordinates, peers, and supervisors to compare and contrast with their self-assessment. This research could extend to external sources such as customers or suppliers. The results from a 360 degree study could be used to shape and sharpen the definition of servant leadership concerning how it is perceived and practiced in organizations. This type of research has the potential to improve organizational effectiveness. It should be noted that the SLP-R© is available in a 360 degree configuration.

Eighth and lastly, there is an opportunity for ongoing study of servant leadership in nonprofit and volunteer organizations as a very understudied subject although society benefits greatly from their efforts. As a corollary, there is an opportunity to explore differences in self-reported servant leader function and performance when the same leader has both paid and unpaid employees working together in the same organization.

Conclusions

The present study contributed to an increase in the overall knowledge regarding the study of servant leadership and the study of Jungian personality type theory. It responded to a call for empirical research suggesting relationship between leader personality preference as measured by the MBTI® and the servant leadership characteristics of vision, empowerment, and service. A fit regression model resulted indicating a predictive relationship between the four personality-based predictor variables and the criterion variable of servant leadership empowerment as controlled by the four control variables.

Contemporary society is experiencing an ongoing crisis of leadership. Kanter (2001) pointed out that "times of upheaval require not just more leadership but more leaders. People at all organizational levels, whether anointed or self-appointed, must be empowered to share leadership responsibilities" (para. 3).

Servant leaders in all segments of society hold the key to influentially guiding themselves and the people that they serve from an uncertain present into a more hopeful future.

The present study was founded on the distinctive and unique personality of the servant leader as an instrumental factor in servant leadership behaviors. It was premised on the practical need for leader self-awareness and the life-long journey of individuation. Servant leaders are integrated persons with full personalities matured by reason of intentional development. Jung (1963) noted, in reflecting on his own life, that the "world will ask you who you are. And if you do not know, the world will tell you" (p. 22). Self-aware servant leaders know themselves first and foremost as servants and after that aspire to the practice of servant leadership for the benefit of others.

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Appendix A

Permission to Use Scale

Wed 10/31/2012 2:42 PM

Hello Paul,

You have our permission to use the RSLP and the accompanying 360 degree for your research. I am attaching what I hope will be some useful tools for using the instrument. When, finished, I would like to see the results that you get from using the instrument.

Best wishes with your research,

Don Page, Ph.D.

Wed 10/31/2012 3:45 PM

Dear Paul,

Thanks for your e-mail. You have my permission to use the Revised Servant Leadership Profile. I have attached a copy to this e-mail. I would be interested in a copy of your findings once your study is complete.

Kind regards,

Paul Wong, Ph.D.

Appendix B

Request for Participation

Thank you for your willingness to take part in a doctoral research study that investigates the relationship between the personality of a leader and the behaviors of that leader. You are being asked to provide some demographic data as well as complete 2 surveys. Your responses are confidential and your identity will remain absolutely anonymous. Please do not put your name on any material.
If at any time you decide not to complete the surveys; please return the materials to the envelope, seal it, and return the envelope to the person who gave it to you.

First, you will take the "Servant Leadership Profile—Revised©". As a leader this survey will assess your self-reported servant leadership practices. Please read the instructions, mark the survey, and when you are finished place the survey back in the envelope.

Second, you will learn your 4 letter personality type as you take the "Myers-Briggs Type Indicator®". There is explanatory information to help you understand your personality preferences which is yours to take with you. When you have finished please remove the single page with all the "X" marks summarizing your responses and place it back in the envelope. The remainder of the MBTI® is yours to keep.

Before you get started, please provide the following demographic information by marking the appropriate box with an "X" and putting this page back in the envelope. When you are finished close the envelope, seal it, and return it to the person who gave it to you with no identifying marks.

Gender		Time of Employment (years)	
Male	☐	0 - 3	☐
Female	☐	4 - 6	☐
Age (years)		7 - 9	☐
20 - 30	☐	More than 9	☐
31 - 40	☐		

41 - 50 ☐

51 - 60 ☐

61 - 70 ☐

More than 70 ☐

As a leader, do you have people directly reporting to you?

Yes ☐

No ☐

Appendix C

Human Subject Research Review Form

1. **PROJECT REVIEW**

X New Project (The HSRB will assign an ID#) _____

☐ Revised Project (Enter ID#) _____

☐ Renewal (Enter ID#) _____

2. **PRINCIPAL INVESTIGATOR** _____Paul E. Greasley_____

Address __on file at Regent University___ Phone __on file at Regent University_

E-Mail ____paulgr1@regent.edu_____ Date ____November 14, 2012_____

List of all project personnel (including faculty, staff, outside individuals or agencies) _____

If you are a **student**, please provide the following additional information:

This research is for **X** Dissertation ☐ Thesis ☐ Independent Study

☐ Other _____

Faculty Advisor's Name: _____Mihai Bocarnea, Ph.D._____

3. **TRAINING:** The National Institutes of Health Office of Extramural Research offers free self-paced online training at phrp.nihtraining.com.

X I have completed human subjects research training. Training Date: _11/14/12_

Attached – Evidence of completion

4. **PROJECT TITLE** _____Exploring the Relationship between a Typology of Personality Preference and Characteristics of Servant Leadership_____

5. **IS THIS RESEARCH BEING SUBMITTED AS PART OF A FUNDED RESEARCH PROPOSAL?** ☐ Yes **X** No

If yes, please identify the funding source: _____

6. **ANTICIPATED LENGTH OF HUMAN SUBJECTS CONTACT**:

Beginning Date __11/20/12_____ Ending Date ___12/20/12_____

7. **DESCRIPTION OF PARTICIPANTS**:

Number __approx 120_____Age Range _____20 – 75_____

Briefly describe subject population: __The subject population is the employee base of the research frame. The term "employee base" makes no distinction between full time and part time employees since this is not a control variable for purposes of this study. The demographic characteristics of the employee base are a subset of the larger demographic characteristics of south Florida including age, gender, and ethnic diversity._____

8. INDICATE THE REVIEW CATEGORY FOR WHICH YOU ARE APPLYING.

☐ I am applying for an **exempt review**, based on *one or more* of the following categories (check all that apply):
Note: Exempt review cannot be claimed for any research involving prisoners and most research involving children.

- ☐ Research conducted in established or commonly accepted educational settings and involving normal educational practices such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods
- ☐ Research involving the use of survey procedures, educational tests (cognitive, diagnostic, aptitude, achievement), interview procedures or observation of public behavior, if information from these sources is recorded in such a manner that participants cannot be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation
  Note: This category cannot be used for research involving children
- ☐ Research involving the use of survey procedures, educational tests (cognitive, diagnostic, aptitude, achievement), interview procedures, or observation of public behavior, if (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter
- ☐ Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects
- ☐ Research and demonstration projects which are conducted by or subject to the approval of federal department or agency heads, and which are designed to study, evaluate, or otherwise examine (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs

X I am applying for an **expedited review**, based on meeting *all* of the following conditions (check all that apply):
Note: Expedited review cannot be claimed for research involving prisoners.

- **X** Research poses no more than minimal risk to subjects (defined as "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily

encountered in daily life or during the performance of routine physical or psychological examinations or tests.")

X Research limited to one or more of the following data collection procedures:

- **X** Collection of data through noninvasive procedures routinely employed in clinical practice
- ☐ Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes
- ☐ Collection of data from voice, video, digital, or image recordings made for research purposes
- **X** Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

  Note: Some research in this category may be classified as exempt; this listing refers only to research that is not exempt.
- ☐ Continuing review of research previously approved by the convened HSRB as follows: (a) where (i) the research is permanently closed to the enrollment of new subjects; (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or (b) where no subjects have been enrolled and no additional risks have been identified; or (c) where the remaining research activities are limited to data analysis.

☐ I am applying for **full board review**.

9. PROJECT DESCRIPTION

Briefly describe (or attach) the methodology and objectives of your research (including hypotheses and/or research questions), the data collection procedures, and any features of the research design that involve procedures or special conditions for participants, including the frequency, duration, and location of their participation. The description should be no longer than 3 pages single space. Attach addendums for materials and detailed descriptions of the research if more space is needed. *Please note that complete chapters of thesis/dissertation proposals will not be accepted.*

___See clarification at end of form__

HSRB Project Description Checklist

	No	Yes
a) Is your data completely anonymous, where there are no possible identifications of the participants.	☐	☒
b) Will you be using existing data or records? If yes, describe in project description (#9 above)	☒	☐
c) Will you be using surveys, questionnaires, interviews or focus groups with subjects? If yes, describe in #9 and include copies of all in application. Please see clarification information on page 10.	☐	☒
d) Will you be using videotape, audiotape, film? If yes, describe	No	Yes

in #9	☐	☒
Please see clarification information on page 10.		
e) Do you plan to use any of the following populations? Regent students, Regent employees, Non-English speaking, cognitively impaired, patients/clients, prisoners, pregnant women? If yes, describe which ones in #9.	No ☒	Yes ☐
f) Do you plan to use minors (under 18)? If yes, describe in #9 and give age ranges	No ☒	Yes ☐
g) Are sites outside of Regent engaged in the research? If yes, describe in #9 and give consent letter or their IRB information.	No ☐	Yes ☒
Please see clarification information on page 10.		
h) Are you collecting sensitive information such as sexual behavior, HIV status, recreational drug use, illegal behaviors, child/elder/physical abuse, immigrations status, etc? If yes, describe in #9.	No ☒	Yes ☐
i) Are you using machines, software, internet devices? If so describe in #9	No ☒	Yes ☐
j) Are you collecting any biological specimens? If yes, describe in #9	No ☒	Yes ☐
k) Will any of the following identifying information be collected: names, telephone numbers, social security number, fax numbers, email addresses, medical records numbers, certificate/license numbers, Web universal resource locators (URLs), Internet protocol (IP) address numbers, fingerprint, voice recording, face photographic image, or any other unique identifying number, code or characteristic other than "dummy" identifiers? If yes, describe in #9	No ☒	Yes ☐
l) Will there be data sharing with any entity outside your research team? If so, describe who in #9	No ☒	Yes ☐
m) Does any member of the research team or their family members have a personal financial interest in the project (for commercialization of product, process or technology, or stand to gain personal financial income from the project)? If yes, describe in #9.	No ☒	Yes ☐
n) As applicable, do you plan to provide a debriefing to your participants? If written, include in application as addendum	No ☒	Yes ☐
o) Will there be any inducement to participate, either monetary or nonmonetary? If there is inducement please describe how the amount is not coercive in #9.	No ☒	Yes ☐
p) Will there be any costs that subjects will bear (travel expenses, parking fees, professional fees, etc. If no costs other than their time to participate, please indicate)? If yes describe in #9	No ☒	Yes ☐
q) Will subjects be studied on Regent University campus? If	No	Yes

	yes, please describe where the study will be done in #9	☒	☐
r)	Will subjects be obtained by internet only? If yes, please describe what internet forums or venues will be used to obtain participants in #9	No ☒	Yes ☐
s)	Are you using the Regent University consent form template? Whether using the template or requesting an alternate form, you must include a copy in your submission.	No ☒	Yes ☐

10. PARTICIPANT RECRUITMENT

Describe the sources of potential participants, how they will be selected and recruited, and how and where you will contact them. Describe all relevant characteristics of the participants with regard to age, ethnic background, sex, institutional status (e.g., patients or prisoners), and their general state of mental and physical health.

The sample for the proposed study will be comprised of employees of the research frame. Recruitment plans include the entire employee base of 175-200 people. Individuals will be contacted by email offering them an opportunity to participate in the research study. Linked to the email will be a short "instructional video" informing the potential participants about the research study. Those interested in participating in the study will receive survey packages from the research frame Human Resources Director. Potential participants will vary in age, ethnic background, gender, and general state of mental and physical health according to the employee demographics of the research frame.

11. INFORMED CONSENT

Describe how you will inform participants of the nature of the study. Attach a copy of your cover letter, script, informed consent form and other information provided to potential participants.

Potential participants in the study will be informed by email and a short "instructional video" that their participation is voluntary and that their responses will be confidential and anonymous. Study participants will be provided a brief explanation of the purpose of the study (i.e., to study personality type and its relationship with servant leadership behaviors), including potential risks (no more than minimal risks are anticipated; see #12), benefits (e.g., increased knowledge regarding their own personality type as a result of taking the MBTI Form M self-scorable), and the opportunity to discontinue participation at anytime. A waiver of written consent is requested for this study based on the qualifications described in the SBL HSRB application (see #12).

**** EXEMPT APPLICATIONS SKIP TO QUESTION 17: ATTACHMENTS ***

12. WRITTEN CONSENT

X I am requesting permission to **waive written consent**, based on one or more of the following categories (check all that apply):

- **X** The only record linking the subject and the research would be the consent document, and the principal risk would be potential harm resulting from a breach of confidentiality.
- **X** The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

☐ I will be using a **written consent form**. Attach a copy of the written consent form with this application.

13. CONFIDENTIALITY OF DATA

What procedures will be used to safeguard identifiable records of individuals and protect the confidentiality of participants?

Participants will each be provided a closed 8.5x11 plain envelope with the study materials inside (1 page Instruction sheet including demographic survey, MBTI, Servant Leadership Profile - Revised). The participants will take the surveys and place their responses back in the envelope. The participants will seal the envelopes and return them to the office of the Human Resources Director. There will be no way of linking a specific person to their unique responses because there are no names on any survey materials. Because no identifiable records of individuals will exist, participant responses will be confidential and anonymous.

**** EXPEDITED APPLICATIONS SKIP TO QUESTION 17: ATTACHMENTS ****

14. RISKS AND BENEFITS

Describe in detail the immediate or long-range risks, if any, to participants that may arise from the procedures used in this study. Indicate any precautions that will be taken to minimize these risks. Also describe the anticipated benefits to participants and to society from the knowledge that may be reasonably expected to result from this study.

15. DEBRIEFING STATEMENT

The two major goals of debriefing are dehoaxing and desensitizing. Participants should be debriefed about any deception that was used in the study. Participants also should be debriefed about their behavioral response(s) to the study. Please describe your debriefing plans and include any statements that you will be providing to the participants.

16. DISSEMINATION & STORAGE OF RESULTS

a) How and where do you plan on disseminating the results of your study?
b) For electronic data stored on a computer, how will it be stored and secured (password, encryption, other comparable safeguard)?
c) For hardcopy data, how will it be stored (locked office or suite, locked cabinet, data coded by team with master list secured separately, other)?
d) What are your plans for disposing of data once the study is ended (give method and time)?

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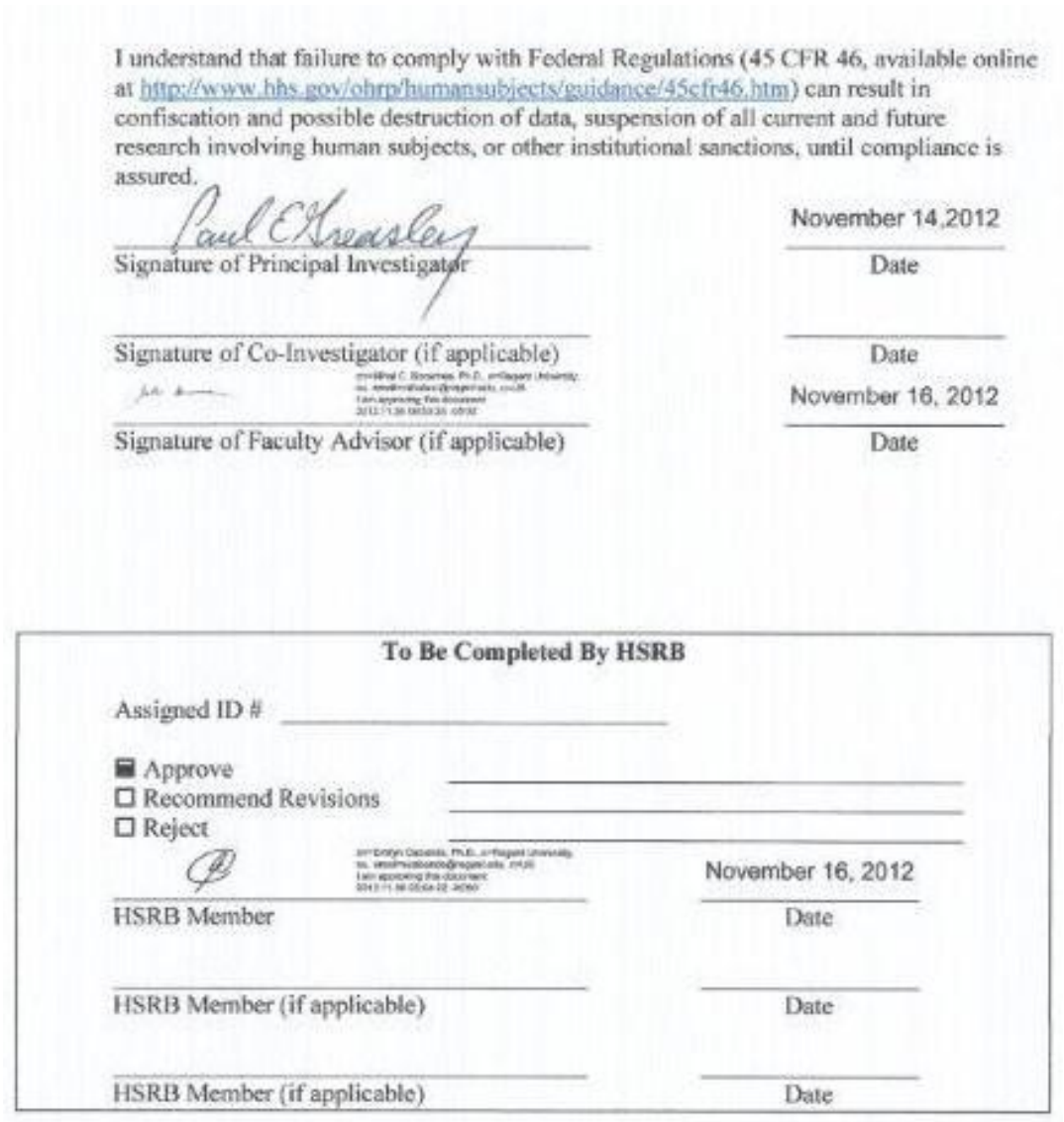
17. **ATTACHMENTS**:
Attach copies of all relevant project materials and documents, including (check all that apply):

X A copy of your training certificate (required for principal investigator)
X Surveys, questionnaires, and/or interview instruments
☐ Informed consent forms or statements
☐ Letters of approval from cooperative agencies, schools, or education boards
☐ Debriefing statements or explanation sheet

18. AFFIRMATION OF COMPLIANCE:

By submitting this application, I attest that I am aware of the applicable principles, policies, regulations, and laws governing the protection of human subjects in research and that I will be guided by them in the conduct of this research. I agree to follow the university policy as outlined in the Faculty & Academic Policy Handbook (available online at http://www.regent.edu/academics/academic_affairs/handbook.cfm) to ensure that the rights and welfare of human participants in my project are properly protected. I understand that the study will not commence until I have received approval of these procedures from the Human Subjects Review Board. I further understand that if data collection continues for more than one year from the approval date, a renewal application must be submitted.

I understand that failure to comply with Federal Regulations (45 CFR 46, available online at http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm) can result in confiscation and possible destruction of data, suspension of all current and future research involving human subjects, or other institutional sanctions, until compliance is assured.



I understand that failure to comply with Federal Regulations (45 CFR 46, available online at http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm) can result in confiscation and possible destruction of data, suspension of all current and future research involving human subjects, or other institutional sanctions, until compliance is assured.

Paul C Kreasley — November 14,2012

Signature of Principal Investigator — Date

Signature of Co-Investigator (if applicable) — Date

November 16, 2012

Signature of Faculty Advisor (if applicable) — Date

To Be Completed By HSRB

Assigned ID # _____

☑ Approve
☐ Recommend Revisions
☐ Reject

November 16, 2012

HSRB Member — Date

HSRB Member (if applicable) — Date

HSRB Member (if applicable) — Date

Question 9

Methodology:

A psychodynamic approach to the study of leadership is proposed that focuses on the personality of the leader and their behavior. A quantitative nonexperimental method will be used, whereby the test variables are measured using the two validated survey instruments. The resultant data will be analyzed using appropriate statistical methods. An individual level of analysis will be used because 1) the theoretical constructs of personality type and behavior investigated in the study are focused on the individual, and 2) the proposed instruments to measure the variables under investigation are self-report in nature.

The study focuses on exploration of the relationship between personality type (Jung's personality type theory as practically implemented and assessed by the

Myers-Briggs Type Indicator) and servant leadership behavior (Greenleaf's servant leadership theory as practically implemented and assessed by Page and Wong's Servant Leadership Profile - Revised).

The MBTI concerns itself with assessing personality type at the self-reported individual level. It has been used successfully for approximately 40 years to assess the personality preference of individuals in many different environmental contexts both domestically and internationally. It has good demonstrated validity and reliability.

The Servant Leadership Profile - Revised was chosen as the proposed servant leadership assessment instrument because 1) it aligns with the self-report characteristic of the MBTI and 2) it was developed as a self-report tool with data obtained from individual servant leaders. The instrument is in active use and has been used by more than 100 organizations and universities for research and evaluation purposes with good demonstrated validity and reliability.

Objectives:

The objectives of the research are:

1) To respond to the explicit and implicit call for empirical research that identifies relationships between the MBTI (leader personality preference) and characteristics of servant leadership (leader behavior).
2) To empirically test the theorized proposition that the typology of Jungian type theory as embodied in the MBTI coupled with the characteristics of servant leadership behaviors will result in a better understanding of both human behavior and leadership theory.
3) To establish a framework for the ongoing pursuit of knowledge regarding a typology of personality as it relates to the study of servant leadership.

Research Hypotheses:

The study has 3 hypotheses and each hypothesis has 4 parts as follows:

H1: There is a positive relationship between a self-reported servant leadership characteristic of "vision" and 1) a self-reported personality preference for the continuous type Extraversion/Introversion (E/I), 2) a self-reported personality preference for the continuous type Sensing/Intuition (S/N), 3) a self-reported personality preference for the continuous type Thinking/Feeling (T/F), and 4) a self-reported personality preference for the continuous type Judging/Perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

H2: There is a positive relationship between a self-reported servant leadership characteristic of "empowerment" and 1) a self-reported personality preference for the continuous type Extraversion/Introversion (E/I), 2) a self-reported personality preference for the continuous type Sensing/Intuition (S/N), 3) a self-reported personality preference for the continuous type Thinking/Feeling (T/F), and 4) a self-reported personality preference for the continuous type Judging/Perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

H3: There is a positive relationship between a self-reported servant leadership characteristic of "service" and 1) a self-reported personality preference for the continuous type Extraversion/Introversion (E/I), 2) a self-reported personality preference for the continuous type Sensing/Intuition (S/N), 3) a self-reported personality preference for the continuous type Thinking/Feeling (T/F), and 4) a self-reported personality preference for the continuous type Judging/Perceiving (J/P), when controlling for the control variables of gender, age, time of employment, and organizational role.

Data collection procedure:

The data collection procedure for the study will offer all employees of the research frame an equal opportunity to take part in the study. Employees will be contacted by email informing them about the study. Linked to the email will be a short "instructional video" informing the potential participants about the research study. Those interested in participating in the study will receive survey packages from the Human Resources Director. Packages will include a page to collect demographic data, a paper and pencil version of the MBTI self-scorable Form M, and a paper and pencil version of the Servant Leadership Profile - Revised. The materials will not be coded in any way in order to maintain participant confidentiality and anonymity. Participants will return their completed survey packages in a sealed envelope to the office of the Human Resource Director. The total time to complete the data collection phase of the study is estimated as two weeks.

Features of the research design that involve procedures or special conditions for participants:

None.

Frequency, duration, and location of research respondent participation:

Frequency – The participants will respond one time.
Duration – The entire survey process is expected to last less than 60 minutes.
Location – The data will be collected at the research frame in Palm Beach Gardens, Fl.

HSRB Project Description Checklist – Item Clarification:

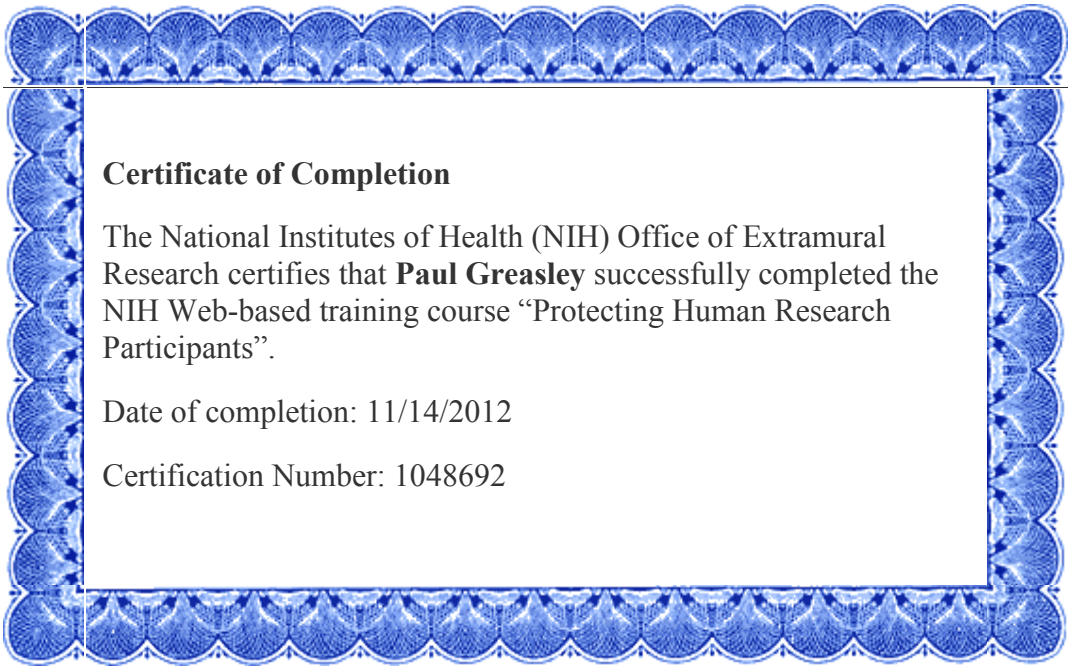
c) Attached is the "Instructional sheet with request for demographic data". The Servant Leadership Profile - Revised is copy-righted and not included. Also the MBTI Form M self-scorable is not attached. Hardcopies can be provided upon request.

d) A short videotape will be prepared by a senior member of the research frame, and used solely as an instructional device for potential survey participants. Use of the video is intended to help assure a high response rate of usable data without

the need to do significant data cleansing. It is not part of the research study itself and will not be used after the data collection phase of the project.

g) A waiver of written consent is requested for this study based on the qualifications described in the SBL HSRB application (see #12).

Evidence of Completion



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Paul Greasley** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/14/2012

Certification Number: 1048692