

The Relationship Between Spiritual Engagement and Authentic Leadership:
Exploring the Core of Leadership

Submitted to Regent University

School of Business & Leadership

In partial fulfillment of the requirements

for the degree of

Doctor of Philosophy in Organizational Leadership

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March/2016

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**THE RELATIONSHIP BETWEEN SPIRITUAL ENGAGEMENT AND
AUTHENTIC LEADERSHIP: EXPLORING THE CORE OF LEADERSHIP**

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March/2016

Abstract

Authentic leadership has garnered recent interest with some theorists suggesting it is a *root construct* of all positive leadership theories (Avolio & Gardner, 2005) and a developable construct that holds promise for advancing leadership (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), yet few antecedents have been investigated. Responding to the call to explore potential antecedents, this research used a quantitative, cross-sectional, survey-based study to examine the relationship of authentic leadership and spiritual engagement. Spiritual engagement is defined as a complex spiritual transformative process of spiritual practices and the attitudes and beliefs that motivate spiritual disciplines and are consequently enhanced by the practices (Roof, Bocarnea, & Winston, 2015). Data were collected from a diverse sample of 65 leaders who self-reported spiritual engagement and 266 associated followers' perceptions of the leaders' authentic leadership using previously validated instruments including the Authentic Leadership Questionnaire (Walumbwa et al., 2008) and the Spiritual Engagement Instrument (Roof et al., 2015). The potential influence of social desirable responses, age, and gender was tested and found to be not significant. The relationship of the four spiritual engagement constructs—worship, meditation, fasting, and rest—were analyzed using multiple regression and found to not be significant predictors of second-order authentic leadership. Post hoc analyses revealed greater reported measures of spiritual engagement worship and fasting in not-for-profit leaders compared with for-profit leaders, but no significant difference in authentic leadership measures was found. An analysis of the relationship of first-order authentic leadership constructs to spiritual engagement found worship positively related to the relational transparency and balanced processing dimensions of authentic leadership. Implications for advancing spiritual engagement and leadership theory, suggestions for practitioners, and future research directions are examined.

Dedication

This work is dedicated to my wife, Diana, a true gift from God whose encouragement, steadfast support, love, and unwavering belief in the importance and purpose of this calling made this gift to God both possible and inevitable. “Make your vows to the Lord your God and perform them; let all around him bring gifts to him who is to be feared” (Pslm 76:11, English Standard Version)

Acknowledgements

I am grateful for the support of so many family members and friends who have made this culminating dissertation possible. First recognition must acknowledge the encouragement, support, and sacrifices of my wife, Diana Lee Roof, whose support was foundational and without whom this effort would have never begun or, if begun, would never have completed. Her efforts have matched or surpassed mine in every respect and this accomplishment is “ours.”

For my parents who are at rest with the Lord but who sacrificed so much for me, instilled their humble midwestern values, and planted the knowledge that it was never too late to learn anew and pursue, this accomplishment is a testament to your lives and work.

To my First Hour Monday morning brothers, Steve Dunkle, Lyle Shepperd, and Mark Koch, who along with Pastor Rob Mahovich, kept my heart directed toward God, prayed with and for me, offering vital fellowship, and lifting me continuously, I am grateful for your friendship and presence in my life.

I am specifically and especially thankful for the guidance, support, and encouragement of Dr. Bruce Winston who has steered this sometimes rudderless ship over the years of scholarly pursuit. His wisdom, responsiveness, and insight were ever present, and, at times of frustration or doubt, Dr. Winston always offered just the right perspective or reminder to right the ship. I believe there is none better. I am grateful as well for Dr. Bocarnea who along with the entire Regent faculty modeled the balance of rigor and grace I aspire to offer my students. The warmth and personal interest of the Regent family made this labor feel like a walk with friends. I will forever remember each with fondness.

To my cohort, especially Brian Williamson, Craig Starbuck, Lew Steinhoff, Troy Hall, and Jamie Brownlee Turgeon, who shared this journey, assisted in great and small ways throughout my pursuits, and offered a community that made this undertaking a labor of fellowship, thank you for walking this path with me.

To the Lord be the glory, for it is His calling, gifting, strength, and guidance that is the source of all I am, all I do, and all I will become. May this work serve Him, honor Him, and bless Him as he has so abundantly blessed me.

Table of Contents

Abstract	iii
Dedication	iv
Acknowledgements	v
List of Tables and Figures.....	ix
Chapter 1 – Introduction	1
Authentic Leadership	2
Spiritual Engagement.....	3
The Authentic Leadership–Spiritual Engagement Relationship.....	4
Research Hypotheses	6
Scope.....	8
Method	8
Analysis.....	9
Study Limitations.....	11
Chapter 2 – Literature Review	12
Authentic Leadership	12
Authentic Leadership Development and Construct Review Works	12
Theoretical Studies of Authentic Leadership	16
Empirical Authentic Leadership Research	18
Spiritual Engagement.....	20
Theoretical, Definitional, and Foundational Support of Spiritual Engagement	20
Theoretical Research Supporting Spiritual Engagement and Spirituality Relevance to Organization and Leadership	22
Empirical Studies of Spiritual Engagement Constructs in Organization and Leadership.....	25
The Authentic Leadership–Spiritual Engagement Relationship.....	29
Spirituality/Spiritual Engagement Dimensions Related to Authentic Leadership.....	29
Spiritual Engagement and Resources for Authentic Leadership	36

Internal Moral Perspective and the Spiritual Engagement–Authentic Leadership Link	38
Summary	40
Chapter 3 – Methods	42
Research Design.....	43
Measures	44
Spiritual Engagement Instrument (SpEI).....	45
Authentic Leadership Questionnaire (ALQ)	45
Social Desirability and Demographics	46
Population and Sampling	47
Data Collection	47
Analysis.....	48
Initial Data Examination and Preparation.....	48
Computation of Scale Reliability and Variable Correlations	50
Testing Social Desirability and Potential Confounders (H ₁ and H ₂).....	50
Multiple Regression for Hypothesis Testing	50
Summary	51
Chapter 4 – Results	52
Initial Data Preparation	52
Population Demographics.....	53
Data Examination	55
Reliability and Relationships	56
Reliability of Scales	56
Correlations.....	56
Hypothesis Testing – Social Desirability and Confounders	57
Social Desirability – H ₁ ^a through H ₁ ^d	57
H ₂ ^a and H ₂ ^b : Potential Confounders.....	58
Hypothesis Testing – Research Hypotheses	59
Post Hoc	60
For-Profit and Not-for-Profit Comparisons	60

Spiritual Engagement Relationships to Individual Authentic Leadership	
Dimensions	61
Results Summary	64
Chapter 5 – Discussion	65
Research Findings.....	66
Implications.....	67
Strengths and Limitations	71
Future Research Directions.....	73
Conclusion	75
References	76
Appendix A	84
Spiritual Engagement Instrument (SpEI).....	84
Appendix B	85
Excerpts of Authentic Leadership Questionnaire (ALQ).....	85
Appendix C	86
Socially Desirable Response Set (SDRS-5).....	86
Appendix D.....	87
Human Subject Research Review Form	87

List of Tables and Figures

Figure 1: Relationship of spiritual engagement dimensions and authentic leadership in the research hypotheses.....	43
Table 2: Demographics of Follower Participants	55
Table 3: Intervariable Correlations	57
Table 4: Worship, Meditation, Fasting, and Rest by Number of Socially Desirable Responses.....	58
Table 5: Independent-Sample <i>t</i> Test of Authentic Leadership Means by Gender ...	59
Table 6: Multivariate Regression for Worship, Meditation, Fasting, and Rest Predicting Authentic Leadership.....	60
Table 7: Independent-Sample <i>t</i> Test of Authentic Leadership Means by Type of Organization, For-Profit or Not-For-Profit	61
Table 8: Independent-Sample <i>t</i> Test of Spiritual Engagement Means by Type of Organization, For-Profit or Not-For-Profit	61
Table 9: Intervariable Correlations With First-Order Authentic Leadership Constructs.....	63

Chapter 1 – Introduction

Gardner, Cogliser, Davis, and Dickens (2011) found that recent scholarly interest in authentic leadership has yielded significant theoretical and nomological findings, but despite the suggestion by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) that authentic leadership is a developable construct, antecedents that may contribute to leadership development have been largely unexplored (Caza, Bagozzi, Woolley, Levy, & Caza, 2010; Gardner et al., 2011). Avolio and Gardner (2005) suggested that authentic leadership is a “root construct” of all positive leadership with the potential for addressing many contemporary ethical and sustainable leadership challenges. A potential antecedent to authentic leadership is spiritual engagement that Roof, Bocarnea, and Winston (2015) defined as “a complex spiritual transformative process involving spiritual practices, attitudes, and beliefs that collectively develop greater connectedness with God and result in the individuals’ affective and cognitive transformation” (p. 3). While many scholars (Burke, 2006; Conger, 1994; Craigie, 1999; Fry, 2003; Issler, 2009; Posner, 2009; Reave, 2005; Strack & Fottler, 2002) have proposed that the leaders’ spiritual dimensions are at the foundation of their leadership, empirical research of the spirituality–leadership relationship using sound instrumentation is lacking (Giacalone & Jurkiewicz, 2003; Reave, 2005). The purpose of this research was to contribute to the understanding of the relationship between spirituality and leadership by exploring spiritual engagement as an antecedent to authentic leadership. The research question examined through this study was whether leaders’ levels of spiritual engagement as measured by four factors of the Spiritual Engagement Instrument (SpEI) could predict authentic leadership as reported by leaders’ followers. The study expanded the understanding of authentic leadership antecedents, answering the call by Gardner et al. for research to explore the nomological network of authentic leadership with a focus on antecedents with leader development potential, and addressed the lack of empirical study of the relationship between spirituality and leadership identified by Reave.

Authentic Leadership

In response to societal changes, ethical failures, and growing interest in more positive leadership, Walumbwa et al. (2008) proposed an authentic leadership definition that incorporated self-awareness, self-regulation, and positive ethical standards and is the definition of authentic leadership that was used for this research.

A pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development. (p. 94)

Authentic leadership reflects a recent trend in leadership studies toward nominal leadership theories where constructs are more related to internal leader attributes that represent who a leader is than behaviors that simply depict what a leader does (Walumbwa et al., 2008; Yukl, 2010). Avolio and Gardner (2005) argued that authentic leadership represents a “root construct” (p. 328) of all positive leadership forms including ethical, servant, transformational, and charismatic leadership, all of which are likely to be enhanced by authentic leadership characteristics. Walumbwa et al. observed that authentic leadership exhibits complex relationships to many related leadership concepts including trust, emotional intelligence, personality, implicit leadership theories, leader–member exchange, and intelligence. Such wide group and dyadic connections suggest that authentic leadership may result in multidimensional organizational influences and reflect core leadership phenomena.

Posner (2009) theorized that authentic leadership was derived from the inner self of the leader and less as the result of external influences. Yukl (2010) suggested that authentic leadership reflects the leader’s identity and describes leaders with high self-awareness and high self-acceptance and who are motivated by expression of values and beliefs rather than a quest for power or acceptance. Inherent in authentic leadership as theorized by Walumbwa et al. (2008) and consistent with the identity-based, internally motivated perspective of authentic

leadership (Posner, 2009; Yukl, 2010) is the theory that authentic leadership can be developed. Authentic leadership development efforts are intended to result in leader behaviors that more closely reflect internal values (Issler, 2009; Quinn, Spreitzer, & Brown, 2000; Walumbwa et al., 2008), causing followers to perceive leaders as more authentic (Fields, 2007).

As Haughey (1994) observed, inauthentic leaders “create inauthentic organizations” (p. 54), and Gardner et al. (2011) established broad support in the literature for the relationship of authentic leadership to a wide range of desirable organizational outcomes. Desirable organizational outcomes that result from authentic leadership may be due to emotional contagion, social exchange, or social identification as theorized by Avolio and Gardner (2005), the effect of behavioral integrity proposed by Leroy, Palanski, and Simmons (2012), or the trust-generating effects of ethical perceptions and follower accommodation suggested by Clapp-Smith, Vogelgesang, and Avey (2009).

Spiritual Engagement

Whitney (2014) observed that for thousands of years, spiritual disciplines have been practiced as motivated by religious obligation, traditions, habits, or man’s inherent desire to connect with the divine. Foster and Griffin (2000) suggested that when motivated by the proper beliefs, attitudes, and expectations, spiritual disciplines can be transformative and result in a growth in spirituality (King, 2008), a result Eck (2002) described as “transforming the human condition” (p. 271). The complex, transformative, reciprocal process whereby the person’s attitudes and beliefs properly motivate spiritual practices and are then consequently affected by the practices was captured in the concept that Roof et al. (2015) described as spiritual engagement. Roof et al. found spiritual engagement involves wide-ranging activities that reflect faith traditions and habits and include meditation, worship, fasting, and spiritual rest. Foster and Griffin as well as Whitney suggested that it is the collective and interactive nature of the combined spiritual practices that transform individual spirituality.

Schwanda (2010) noted that spiritual engagement is not just a feeling or perception but that it is experiential and enhances the heart–head connection. Sheep and Foreman (2012) argued that identity and spirituality are related ontological concepts, supporting the potential for spiritual development to result in internal development of the individual’s identity. Dimensions that have been theorized as affected by spiritual engagement include ethics and values (Garcia-Zamor, 2003; Ghazzawi, Smith, & Cao, 2012), clarity of purpose or calling (Neal, 2000), emotional intelligence and the interpretation of events (Kriger & Seng, 2005; Tischler, Biberman, & McKeage, 2002), and optimism and emotional well-being (Ai, Peterson, Bolling, & Koenig, 2002).

Issler (2009) suggested that beliefs are generally stable and change resistant, and they will be socially constructed if not intentionally pursued through the truth seeking of spiritual engagement. Fry (2003) argued those resulting core beliefs form the basis for higher-order, intrinsic motivation. Spiritual engagement dimensions have been associated with character development and humility (Sanders, 2007; Whittington & Scher, 2010), coping under stress (Bade & Cook, 2008; Marques, Dhiman, & King, 2005), hope (Laird, Snyder, Rapoff, & Green, 2004), burnout prevention (Chandler, 2009, 2010), emotional self-care (Chandler, 2009), and job satisfaction (Ghazzawi et al., 2012). The promotion of deeper spirituality through spiritual engagement has the potential to enhance intrinsic balance, moral stability, emotional strength, and motivation. As Whitney (2014) described, spiritual engagement can transform the spirit like the gymnasium develops the body.

The Authentic Leadership–Spiritual Engagement Relationship

Craigie (1999) wrote, “Leadership also requires a willingness to pursue an inward, spiritual journey” (p. 46), and Gould (2005) observed that true development results from new selves that alter core motivations, inner beliefs, and implicit decision models rather than just training better behaviors. Authentic leadership reflects the spiritual center (Stonecipher, 2012) or, as Issler (2009) described, “deeply held core beliefs” (p. 179) that drive the leaders’ behaviors. This

research explores the spiritual inner-self beliefs, identity, values, and resources that spiritual engagement can affect and that theoretically connect with authentic leadership.

Reave (2005) reviewed over 150 studies of spirituality and leadership and found consistent support for the relationship between spirituality and leadership. The spirituality values within the studies were dimensions associated with authentic leadership such as integrity, honesty, humility, and respect (Reave, 2005). Leader spirituality has been related to various underlying authentic leadership characteristics, including identity (Chusmir & Koberg, 1988; King, 2008; Korac-Kakabadse, Kouzmin, & Kakabadse, 2002; McDermott, 1994; Sherman, 2005), self-awareness (Ashmos & Duchon, 2000; Hoppe, 2005; Karakas, 2010; Strack & Fottler, 2002), humility (Korac-Kakabadse et al., 2002), self-esteem (Whittington & Scher, 2010), the inner-self (Posner, 2009), emotional intelligence (Tischler et al., 2002), proper interpretation of events and motives (Komala & Ganesh, 2007), and a shared ontology between spirituality and authentic leadership (Sheep & Foreman, 2012).

Spiritual engagement has been specifically connected with the values that are encompassed in the authentic leadership dimension of internal moral perspective, including morals (Clark & Dawson, 1996; Fernando & Jackson, 2006; Fry, 2003), ethics (Crossman, 2010; Escobar, 2011; Ettore, 1996), purpose (Komala & Ganesh, 2007), moral perspective (Garcia-Zamor, 2003; Phipps, 2012), values integration (Strack & Fottler, 2002), meaning framework (Solomon & Hunter, 2002), principles (Sass, 2000), and character shaping (Eck, 2002; Gould, 2005). Researchers have also found spiritual engagement dimensions related to essential leader resources (Bade & Cook, 2008), specifically vitality (Meisenhelder & Chandler, 2001), energy (McNeal, 2000), diminished narcissism (Neal, 2000), emotional strengthening (Chandler, 2009; Vasconcelos, 2010), and mental and psychological health (Gould, 2005; Meisenhelder & Chandler, 2001). Piedmont (1999) argued that the influence of spirituality on self-awareness and behavior was significant enough to consider spirituality as a sixth personality factor. The beliefs, values, awareness, identity, and resources related to spirituality and spiritual

engagement align with behaviors and the diminished willing–doing gap that characterize authentic leadership (Issler, 2009). Spiritual efforts can assist the leader in discovering their authentic self (Conger, 1994), resulting in increased authentic leadership.

Research Hypotheses

The purpose of this research is to explore whether the theoretical relationship between the four dimensions of spiritual engagement as reported by leaders using the SpEI and authentic leadership as perceived by and captured from followers using the Authentic Leadership Questionnaire (ALQ) can be empirically supported. No previous research has examined the theoretical relationships between authentic leadership (AL) and spiritual engagement (SpE) as supported by the literature.

The study examined potential sources of bias and confounding effects for influence. Since different respondents provided the independent and dependent variable data, common method variance was not of concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Since the potential existed for social desirability bias among leaders responding to the SpEI, the study used the Socially Desirable Response Set Five-Item Survey (SDRS-5; Hays, Hayashi, & Stewart, 1989) to measure possible bias and test the hypotheses that differences in each spiritual engagement dimension measure were not related to social desirability. The social desirability hypotheses tested were:

- H₁^a: There is not a significant difference in leader-reported worship based on number of extreme social desirability responses.
- H₁^b: There is not a significant difference in leader-reported meditation based on number of extreme social desirability responses.
- H₁^c: There is not a significant difference in leader-reported fasting based on number of extreme social desirability responses.
- H₁^d: There is not a significant difference in leader-reported rest based on number of extreme social desirability responses.

Instructions were provided to leaders completing the SpEI that were designed to encourage accurate responses with minimal social acceptability influences.

In addition to the SDRS-5, leader surveys included demographic items identified from the literature with some potential to influence the spiritual engagement–authentic leadership relationship, including age (Chandler, 2009; Marschke, Preziosi, & Harrington, 2011; Meisenhelder & Chandler, 2001), gender (Bussing, Matthiessen, & Ostermann, 2005; Meisenhelder & Chandler, 2001; Underwood & Teresi, 2002), religious affiliation (Bussing et al., 2005; Vecchio, 1980; Whittington & Scher, 2010), marital status (Bussing et al., 2005) and race (Underwood & Teresi, 2002). Prior research theorized that gender and age might confound relationships, although significant influence did not emerge during their analysis (Marschke et al.; Meisenhelder & Chandler, 2001); therefore, the testing was performed to confirm that variables of age and gender were not influencing the relationships of interest using the following hypotheses:

- H₂^a: Authentic leadership is not significantly associated with leaders' age,
- H₂^b: Authentic leadership is not significantly different between leaders' gender.

The research hypotheses developed from the literature to explore the relationships between spiritual engagement and authentic leadership included:

- H₃: Worship (W) is positively associated with follower-reported authentic leadership (AL).
- H₄: Meditation (M) is positively associated with follower-reported authentic leadership (AL).
- H₅: Fasting (F) is positively associated with follower-reported authentic leadership (AL).
- H₆: Rest (R) is positively associated with follower-reported authentic leadership (AL).
- H₇: Worship (W), meditation (M), fasting (F), and rest (R) will significantly predict follower-reported authentic leadership (AL).

Scope

This study empirically examined the relationship between the four dimensions of spiritual engagement (Roof et al., 2015) in leaders and their follower-perceived authentic leadership characteristics through testing four theoretically supported hypotheses. Spirituality and religiosity definitions vary widely, and Karakas (2010) found over 70 variations ranging from New Age altruism and esthetics to orthodox religiosity, but this research was limited to the spiritual engagement concept encompassing beliefs, attitudes, and behaviors intended to transform and as captured by the SpEI (Roof et al., 2015) and was not intended to consider religiosity or other spirituality constructs. Authentic leadership is also an early stage concept and has been subject to varying conceptualizations (Caza et al., 2010), but this research specifically examined the ethically based construct as defined by Walumbwa et al. (2008) with dimensions of self-awareness, internal moral perspectives, balanced processing, and relational transparency. While both spiritual engagement and authentic leadership may affect other organizational, leadership, and individual dimensions, this study was concerned specifically with spiritual engagement as an antecedent to authentic leadership. Understanding the spiritual engagement–authentic leadership relationship will advance insight into the spiritual foundations of authentic leadership and explore the potential for active spiritual practices to influence leadership formation.

Method

Leaders from U.S.-based organizations and individual leaders of varying characteristics who were reasonably expected to relate to the SpE construct along with all of the leaders' associated followers were sampled in a cross-sectional research design. Individualized links were distributed to allow access to a FluidSurveys-hosted survey containing the four-factor SpEI for leaders or the ALQ for followers.

Hair, Black, Babin, and Anderson (2010) recommended that studies include 15 to 20 participants per variable for multiple regression, so with four independent

spiritual engagement variables in the research design, a minimum of 60 to 80 participants were required for analysis.

Participants were selected from commercial, nonprofit, and ecclesiastical organizations that agreed to participate, as well as individual leaders. For leaders from participating organizations and individual leader participants, all followers were identified and asked to complete the ALQ with survey responses used to derive their leader's average authentic leader measure. Survey links were encoded allowing identification of followers with respective leaders, and leader and follower responses were associated during initial data preparation as discussed within the analysis section of this proposal.

This study employed existing validated instrumentation for authentic leadership and spiritual engagement. Walumbwa et al. (2008) developed the ALQ and it has been widely used to assess authentic leadership; exhibit sound psychometrics, validity, and reliability across populations and cultures (Roof, 2014); and reflect the authentic leadership construct, including the ethical component consistent with this research design. The 16-item ALQ was used to measure follower-reported authentic leadership.

The SpEI recently developed and validated by Roof et al. (2015) was used to capture the construct of spiritual engagement, which encompasses behaviors, beliefs, and attitudes that have been practiced for thousands of years across various faith traditions to affect individuals' cognitive and affective spiritual transformation. Leader participants completed the four-factor, 20-item instrument which allowed for assessing the relationship of spiritual engagement and authentic leadership.

Analysis

Participant responses were imported from Fluidsurveys into Microsoft Excel and SPSS 23.0 for analysis, missing data were scrutinized for bias, and data were corrected or eliminated. Demographics were evaluated for sample representativeness and descriptive statistics generated. Each follower response was identified and coded with their leader identification. Leader social desirability

extreme responses were calculated from the SDRS-5 data for use in testing H_1^a through H_1^d (Hays et al., 1989), and follower authentic leadership responses were averaged and entered into their respective leaders' data resulting in a complete data record with independent variables, dependent variable, SDRS-5 scores, and demographics. Hypothesis testing was performed using the appropriate statistical tools as follows:

- H_1^a - H_1^d : A one-way analysis of variance (ANOVA) examined differences in the four spiritual engagement measures by number of extreme SDRS-5 responses (0-5).
- H_2^a : Age reported in years was analyzed using correlation to determine if the relationship with authentic leadership was significant.
- H_2^b : Differences in authentic leadership by gender were measured for significance using independent-sample t test.
- H_3 - H_6 : Correlation analysis was performed to determine if significant relationships existed between each of the four variables of spiritual engagement measured by the SpEI and average follower-reported authentic leadership from the ALQ.
- H_7 : Multiple regression with the four SpE variables of worship (W), meditation (M), fasting (F), and rest (R) and the dependent variable of authentic leadership from the average follower ALQ responses was used to determine if the SpE variables were significant predictors of AL.

In addition, difference testing using ANOVAs and t tests appropriate for the number of categories within groups and other appropriate statistical analyses were conducted to assist in interpretation of research findings and examine demographic group differences.

Study Limitations

While valid instruments and random population selection supported sound study conclusions and theoretical support was developed for the influence of spiritual engagement on authentic leadership, the cross-sectional survey design of the proposed research limited the ability to establish clear causation. Generalizability of the results was also limited based on the inclusion of only U.S. participants in the sample population and due to other religious, race, and gender characteristics as revealed by the sample demographics and by a lack of leaders who were representative of the full range of spiritual engagement types and intensities. Despite the population and characteristics limits, the insight into spiritual engagement–authentic leadership relationships made a meaningful contribution to leadership theory. Spiritual engagement reporting was potentially susceptible to social desirability bias and while measures were included to test the influence of social desirability bias and efforts made to minimize bias through survey design and instruction sets, detection or elimination of all such bias was not possible.

Chapter 2 – Literature Review

This research was designed to examine organizational leaders' self-reported spiritual engagement as an antecedent to authentic leadership as perceived by the leaders' followers. Spiritual engagement is a recently defined concept representing the behaviors, beliefs, and attitudes that support spiritual transformation (Roof et al., 2015) and is connected with authentic leadership, which is a relatively new normative or ethical class of leadership theory (Yukl, 2010) through the shared spiritual dimensions of the constructs. This chapter presents the literature relevant to authentic leadership theory and spiritual engagement and the resulting research guidance and hypotheses derived. A summary of the resulting findings from the literature is presented at the conclusion of this chapter.

Authentic Leadership

Authentic leadership is an early stage theory with varying definitions and essential dimensions, but constant across the variations is a foundation of positive values, consistency between espoused and in-use behaviors, and trusting relationships with followers (Walumbwa et al., 2008; Yukl, 2010). Avolio and Gardner (2005) argued that authentic leadership is at the root of the contemporary positive leadership trend, but little empirical research has explored antecedents or facilitators of authentic leadership (Yukl, 2010). Authentic leadership is driven by core values, beliefs, and the leaders' self-identity (Conger, 1994; Yukl, 2010). Authentic leadership literature relevant to this research is presented in this review including construct development studies, theoretical essays, and representative empirical research that have illustrated the relevance of authentic leadership to desirable organizational outcomes.

Authentic Leadership Development and Construct Review Works

Gardner et al. (2011) reviewed authentic leadership literature from a historical development perspective and included the analysis of then current research characterizations finding competing authentic leadership definitions typical of early stage theories but with recent trends toward reconciliation of various concepts. In reviewing the theoretical foundation of the 91 articles

included, Gardner et al. identified themes including identity and self-based constructs of self-awareness, self-knowledge, and self-esteem as well as consistent values or an ethics focus. Much of the existing work was theoretical with only 16 articles describing quantitative empirical research, 12 using cross-sectional designs, four being longitudinal in nature, and most approaching the analysis using correlation analysis (Gardner et al., 2011). Only two of the 91 studies that Gardner et al. examined involved authentic leadership antecedents revealing a glaring lack of research into causes of authentic leadership. The lack of empirical research into authentic leadership antecedents is addressed by the current study, and the authentic leadership theoretical foundations of identity, self, and values found thematically in Gardner et al.'s literature review are consistent with the values within the constructs selected as independent variables that may potentially influence authentic leadership behaviors.

Walumbwa et al. (2008) performed research to define, refine, and validate the authentic leadership construct and to develop a validated measure using theory and both inductive and deductive methods. The wide-ranging work developed a multidimensional authentic leadership measure, the Authentic Leadership Questionnaire (ALQ), which used multiple multicultural samples from the United States, China, and Kenya, each with varying validation purposes (Walumbwa et al., 2008). The resulting proposed authentic leadership concept incorporated positive leadership, word and action consistency, ethics, and being true to self, which acted to build trust and elevated performance and psychological well-being among followers (Walumbwa et al., 2008). Walumbwa et al.'s resulting authentic leadership concept encompassed four dimensions of self-awareness, internalized moral perspective, balanced processing, and relational transparency.

Walumbwa et al. (2008) performed an extensive literature review of emerging authentic leadership theory and research as well as transformational and ethical leadership to establish their multidimensional authentic leadership definition and to derive initial instrument items. The definition was consistent with and refined by a qualitative study of authentic leadership perspectives involving doctoral students engaged in leadership research, and an initial pool of 22

theoretically derived items was reduced by including only those successfully categorized by 80% of the leadership scholars (Walumbwa et al., 2008). Initial empirical validation was performed by Walumbwa et al. using confirmatory factor analysis based on a sample of 224 manufacturing employees from the United States and 212 Chinese employees from a state-owned company with findings from the two samples consistent. Comparing the authentic leadership construct as a one-factor, first-order factor model, and second-order factor model revealed interdependence of the four factors on self-awareness, internalized moral perspective, relational transparency, and balanced processing, and the interdependence was explained by a second-order factor (Walumbwa et al., 2008). The construct validity, inclusion of an ethical component, and theoretical derivation of authentic leadership support the use of the definition and related ALQ measure for this research. In addition, the initial validation and later corroboration efforts (Roof, 2014) supported the second-order representation of authentic leadership as a better reflection of the underlying latent variables suggesting that authentic leadership be approached as a single dependent variable for this research.

Walumbwa et al. (2008) performed two additional studies to explore the construct and nomological validity of the ALQ as well as to examine the psychometric properties of the measure more fully. The first study involved student samples of 178 and 236 surveys collected a semester apart to test the discriminant validity from the leadership constructs of ethical leadership and transformational leadership (Walumbwa et al., 2008). Results indicated that authentic leadership as measured by the ALQ was positively associated with but distinguishable from both ethical and transformational leadership (Walumbwa et al., 2008). Walumbwa et al. also used the student survey data to support incremental predictive validity of the ALQ by controlling for ethical and transformational leadership while evaluating authentic leadership's prediction of organizational citizenship behavior, organizational commitment, and follower satisfaction with supervisor. To provide additional nomological validity support, Walumbwa et al. surveyed 478 Kenyan employees of a U.S. firm in Africa measuring authentic leadership, job satisfaction, and job performance finding authentic leadership positively related to the

satisfaction and performance measures. These two additional studies conducted by Walumbwa et al., provided evidence for authentic leadership as a distinct construct from yet related to the positive theories of ethical and transformational leadership, supported the construct validity, verified the predictive association with desirable organizational outcomes, and confirmed the theoretical connection of authentic leadership and internally focused leadership dimensions. The Walumbwa et al. findings further supported the use of authentic leadership in this research as a valid construct, which can be effectively measured by the ALQ and is associated with positive organizational outcomes.

Caza et al. (2010) studied the ALQ along with the psychological capital questionnaire for examining the convergent validity, gender validity, and usability in the low power–distance culture of New Zealand of the two instruments. Gathering a sample of 960 working adults and employing structural equation modeling (SEM), Caza et al. found support for convergent validity of the ALQ, measurement validity across genders, and effective applicability within the New Zealand culture as well as additional support for the second-order ALQ construct. The Caza et al. research reinforced the use of the ALQ second-order construct as appropriate for this research study as an effective, widely applicable measure of the theorized authentic leadership behavioral dimensions. The researchers also offered the theoretical perspective that authentic leadership was relatively stable but could be potentially affected by focused interventions considering that antecedents were a mix of “traits, developmental experiences, and environmental cues” (Caza et al., 2010, p. 56). Caza et al. supported spiritual engagement as a potential influencer as further discussed in the Authentic Leadership–Spiritual Engagement Relationship literature section.

Avolio and Gardner (2005) proffered a summary of authentic leadership, resulting from an initial summit of scholars who gathered to examine the concept and identified key theoretical elements including leader values, emotions, and self-transcendent values. The self-awareness and self-regulation necessary for authentic leadership was suggested to be an emerging process that involves understanding purpose, talents, strengths, core beliefs, and identity and which “occurs when

individuals are cognizant of their own existence, and what constitutes that existence within the context within which they operate over time” (Avolio & Gardner, 2005, p. 324). Avolio and Gardner suggested that authentic leadership is a “root construct” of positive leadership models such as servant and transformational leadership and the positive emotions emanating from authentic leaders affect followers through emotional contagion. The root nature of authentic leadership within the leadership theories renders the construct particularly appropriate for use as a dependent variable in this study of positive leadership antecedents, and the values, self-awareness, positive emotions, identity, and self-existence underpinnings of the authentic leadership construct (Avolio & Gardner, 2005) are consistent with the influences of spirituality and spiritual engagement.

Theoretical Studies of Authentic Leadership

Yukl (2010) included within the ethical leadership portion of his textbook a section on authentic leadership as a normative theory reflective of the ideal leader and encompassing consistency in words and actions, positive values, high self-awareness, elevated self-acceptance, decreased defensiveness, and trusting relationships that result from a basic motivation to enact beliefs rather than acquire power. In differentiating positive leadership forms, Yukl defined authentic leadership as based on self-regulation and positive psychology theory, which influence through a broad projection of the leader-self of “personal identification, social identification, emotional contagion, and social exchange” (p. 427). Authentic leadership, which is belief-driven, is sourced in the leaders’ identity, and involves complex influence mechanisms, is susceptible to development through enhanced self-awareness and clarity of core values, beliefs, and identity (Yukl, 2010). Yukl suggested, “Some cultural values and beliefs influence behavior despite little or no conscious awareness” (p. 426). If authentic leadership is sourced in self-understanding, identity, and less conscious beliefs and values, spiritual engagement should be shown in this research to develop the leaders’ spirit, clarify inner values and beliefs, and increase perceived authentic leadership.

Posner (2009) in his essay on leadership argued that most leadership theory and resulting leadership books are just fine, but the teaching of leadership has to

address the internal forces that make successful leadership and leaders. Authentic leadership cannot be taught or developed through learning external practices or behaviors. Posner suggested that development comes from clarifying values, understanding motivation to lead, identifying true purpose, and developing the leaders' inner self. Authentic leadership is leading from the self and not mimicking other leader styles (Posner, 2009). If effective authentic leadership grows from the leaders' identity and self-awareness, which manifest in genuine behaviors, and identity and deep understanding resides in the inner being or spirit, this research should find greater authentic leadership characteristics related to increased efforts to develop those inner spiritual-based dimensions through spiritual engagement.

In a theoretical essay examining advanced change theory as a model of personal change, Quinn et al. (2000) suggested that the use of enhanced cognitive, moral, and behavioral complexity was necessary for transforming one away from self-interests. Quinn et al. drew on principles and practices illustrated by Jesus, Gandhi, and King to describe how overcoming self-deception through self-purification, value clarification, and the search for the "real me" could result in a decrease in the integrity gap and hypocrisy resulting in elevated authenticity. Quinn et al. suggested that the development of the authentic self would result in a leader who operates comfortably on the edge of chaos through faith in purpose and self, is confident that the outcome is a consequence, and is guided by self-clarity and the power of soul released. Such a strong inner dimension allows the leader to follow self-values and not rules (Quinn et al., 2000). The necessity of development of the inner self or soul to effect change through authentic leadership supports spiritual development through spiritual engagement as an effective development strategy for authentic leadership, the relationship that is studied by this research.

In presenting the importance of follower perception for authentic leadership effectiveness, Fields (2007) identified authentic leadership attributes as (a) greater self-information processing capability such as with values, beliefs, and emotions; (b) regulation of leader behaviors using a self-system; (c) elevated identity or clarity of self; and (d) well-developed ability to handle conflicting social demands and self (p. 195). While the saying–doing consistency was identified by Fields as

being of greatest effect in follower perception of authentic leadership and resulting effectiveness, well-developed and communicated values that reflect the authentic leader's identity or spiritual self were also identified as affecting perception of integrity. To the extent that identity and self-clarity are reflective of the leader's spirituality and developable by the leaders' spiritual engagement, this research should find a positive relationship between spiritual engagement and authentic leadership as perceived by followers.

Haughey's (1994) chapter on spirituality and integrity explored the leadership evolution and principles of Vaclav Havel, the former president of the Czech Republic, finding that the integration of leadership with organizational life and spirituality epitomized authentic leadership. The effective principles declared and demonstrated by Havel as captured by Haughey included (a) the true cultural transformation sought by all effective leaders was only possible when behavior was based on true spiritual values or conscience, (b) the collective conscious-driven leaders' and followers' actions were required to overcome the inertia of systems at rest and thereby create change, (c) authenticity is based on spirituality and conscience lived, (d) inauthentic leaders "create inauthentic organizations" (p. 54) and generate more inauthentic people, and (e) deepened spirituality results in a sense that someone is constantly observing a leader's behavior driving greater integrity of actions and creating meaning for activities. The connection of spiritual development, meaning, authenticity or integrity, and leader behaviors revealed in the Haughey chapter on Havel suggests that developing spiritual depth through spiritual engagement should positively predict higher authentic leadership and that authentic leadership supports effective cultural-based leadership.

Empirical Authentic Leadership Research

In a survey within 25 Belgian organizations of 49 teams and 252 participants, Leroy et al. (2012) found support for a positive relationship between authentic leadership and affective organizational commitment with leader behavioral integrity fully mediating the relationship. In a second model, follower work–role performance was found positively related to authentic leadership and leader behavioral integrity with affective organizational commitment fully

mediating the relationships. While both models considered aspects of leader integrity, Leroy et al. argued that authentic leadership is being true to self, whereby behavioral integrity is being true to one's word. Other leadership researchers (Fields, 2007; Haughey, 1994; Walumbwa et al., 2008) identified behavioral integrity as an inherent element in authentic leadership as perceived by followers. Whether behavioral integrity is a mediator or integral to authentic leadership, Leroy et al. connected the authentic leadership and behavioral integrity constructs positively with affective organizational commitment and work performance supporting the use of authentic leadership as a dependent variable meaningful to organizational and follower outcomes for this research.

In a study to contribute to the scant evidence of authentic leadership's effect on organizational performance while examining authentic leadership, positive psychological capital, and trust at the group rather than dyadic level, Clapp-Smith et al. (2009) surveyed 89 employees from 26 retail stores. Prior research had established that authentic leadership was positively related to individual organizational citizenship behavior, commitment, and satisfaction (Walumbwa et al., 2008), and in examining the relationships from a group relationships perspective, Clapp-Smith et al. found authentic leadership positively related to performance as measured by sales growth with the relationship partially mediated by trust. Trust represents a belief that the leader genuinely attempts to act in alignment with their espoused beliefs and goals, and since authentic leadership shares the concept of espoused-in use integrity, the relationship between authentic leadership and trust is not unexpected (Clapp-Smith et al., 2009). The study finding of group level relationships suggested that peers jointly construct meaning around authenticity and trust through social contagion or other social influences rendering the authentic leadership influence impactful at both the individual and group levels (Clapp-Smith et al., 2009). Clapp-Smith et al. research broaden the supported influence of authentic leadership on performance and trust, suggesting it as an appropriate dependent variable for this research as it represents a construct of meaningful organizational and individual impact.

Spiritual Engagement

Spiritual engagement is a newly defined construct of active spirituality encompassing behaviors, attitudes, and beliefs that form a transformative cycle whereby the engagement reinforces underlying motivations for the practice and enhances transcendent connections and individual spirituality (Roof et al., 2015). Literature is presented that provides definition and foundational theory, and the relevance of spiritual engagement and spirituality in organization and leadership is supported by theoretical studies and empirical research.

Theoretical, Definitional, and Foundational Support of Spiritual Engagement

In examining spirituality from an active, transformational perspective, Roof et al. (2015) developed spiritual engagement theory and an associated Spiritual Engagement Instrument (SpEI), which integrated not only an individual's state of spirituality but also encompassed spiritual practices, attitudes, and beliefs that collectively advanced one's relationship with God and transformed the individual. That is, spiritual engagement is properly motivated practices intended to develop greater connectedness with God, promote holiness, and affect the beliefs and attitudes that promote further spiritual engagement (Roof et al., 2015). Roof et al. differentiated the spiritual engagement concept from the various previously defined spirituality constructs, proposing that spiritual engagement, informed by faith traditions, theology, and worldview, is a reciprocal process using behaviors including fasting, meditation, worship, and spiritual rest to fundamentally develop and exercise individual spirituality. Spiritual engagement is a complex, reciprocal, active, transformational concept, whereby spirituality is more of a condition or internal state (Roof et al., 2015). Spiritual engagement, in advancing individual spirituality in leaders, offers the potential of affecting those spirituality–leadership dimensions of reduced burnout (Chandler, 2009), molding character and emotions (Eck, 2002), aligning in-use and espoused theories (Fields, 2007; Fry, 2003; Walumbwa et al., 2008), bolstering individual resources (Byrne et al., 2014), and influencing values and attitudes (Kriger & Seng, 2005) strengthening the leaders' self-awareness, identity, and moral clarity (Roof et al., 2015).

Roof et al. (2015) developed the SpEI based on 30 items derived from theory, reviewed by experts, and submitted to a development population of 197 participants drawn from a convenience sample. Responses used a 6-point Likert scale for rating. The development study performed by Roof et al. included items for testing convergent validity from the Brief Multidimensional Measure of Religiousness/Spirituality (Fetzer Institute, 2014) and the Daily Spiritual Experience Scale (Underwood, 2011) along with the Hays et al. (1989) Socially Desirable Response Set Five-Item Survey (SDRS-5). The survey data were analyzed using principal component analysis, which resulted in a four-factor scale of worship, meditation, fasting, and rest explaining 85.24% of the variance and exhibiting Cronbach's alpha reliability values of .94 to .99 and significant correlations with the validation scales (Roof et al., 2015). The construct of spiritual engagement as measured by the validated SpEI is theorized to actively transform individual spirituality promoting self-awareness, identity, emotional intelligence, reduced burnout, and moral clarity (Roof et al., 2015), which are dimensions inherent in authentic leadership. Therefore, the four dimensions of spiritual engagement should each positively relate to authentic leadership. Throughout this research, discussions of spiritual engagement and measurement by the SpEI will refer to the construct developed and four factors of spiritual engagement derived by Roof et al.

Whitney (2014) explored the history and practice of spiritual disciplines suggesting that for thousands of years, spiritual disciplines were motivated by religious obligation, traditions, habits, or man's inherent desire to connect with the divine. The disciplines when practiced with direction and purpose promote holiness, strengthen relationships with God, become as being as doing, and are transformative in nature (Whitney, 2014). Whitney's examination of spiritual disciplines and their transformative nature is consistent with the spiritual engagement construct defined by Roof et al. (2015) and supports the hypothesis that spiritual engagement will transform leaders' spirituality, strengthening awareness, clarity, identity, and moral courage resulting in a positive relationship to authentic leadership.

Foster and Griffin (2000) collected readings on spiritual disciplines and noted that the disciplines are not just religious activities but are intended to be spiritually forming and transforming. The proper practice of spiritual engagement is an ongoing process whereby emotional and spiritual challenges are confronted, spirituality is enhanced, and spiritual identity is renewed resulting in deep transformation, healing, self-clarity, and soundness of decision making (Foster & Griffin, 2000). The multidimensional growth from spiritual engagement as defined by Foster and Griffin supports the hypotheses that spiritual engagement will be positively related to authentic leadership because it advances individual characteristics that are underlying essentials for authentic leadership.

Some of the rich foundation of spiritual engagement was revealed in Schwanda's (2010) review of the Puritan spiritual practices wherein the piety and devotional and religious practices were essential in the Puritans' pursuit of spirituality. Involving secret, private, and public efforts, Schwanda suggested spiritual disciplines be considered as any practice that "awaken, strengthen, or deepen" (p. 26) a person's connection with God, thereby creating intimacy. One of the fundamentals of spiritual engagement identified by Schwanda was the intentional integration of emotion, or heart, and intellect, or head, brought about by active piety, noting that spiritual engagement is not just a feeling or perception but is also experiential and enhances that heart-head connection. Combining the subjective and objective in pursuing a closer relationship with the Divine, Schwanda argued that the integration and balance of the work and the wonder of spiritual disciplines is what transforms the soul. Schwanda's essay on spiritual disciplines informs the definition of spiritual engagement used in this research, which includes the attitudes, beliefs, and behaviors or the heart-head connection described within the Schwanda essay.

Theoretical Research Supporting Spiritual Engagement and Spirituality Relevance to Organization and Leadership

King (2008) argued that management research has found the courage to study sensitive constructs such as race, gender, and sexual orientation but has largely avoided the study of religion. With over 80% of Americans considering

religion important to them and 84% of the world's population identifying with one of the major religious traditions, research of religion in organizations has not reflected the influence (King, 2008). King suggested that religion and spirituality affect leader's identity, ethics, and individual resources, yet the growing trends toward secularization and rational decision theory has inhibited widespread study. While researchers have been challenged by pressure to decouple religion and spirituality as well as definitional disputes, King proposed that research into religion, spirituality, and faith within organization and leadership domains can yield meaningful insights, since the fundamental identities and worldviews resulting from faith significantly affect leaders and other organizational members' actions. King's identification of the dearth of research into religion and spirituality related to leadership informs the focus of this research of the spiritual engagement relationship to authentic leadership. Answering King's call for religion and spirituality measures with sound construct validity, the SpEI was selected for this study to capture the important beliefs, attitudes, and behaviors as shaped by the respondent's faith tradition, religion, or theology as related to the pursuit of greater relationships with the divine.

Exploring spiritual disciplines within the clinical psychotherapeutic setting, Eck (2002) argued that while still of modest application, the integration of client appropriate spiritual and religious practices has the potential of "transforming the human condition" (p. 271). Therapists have been increasingly recognizing that spiritual and religious traditions are orienting frameworks for many clients, yet professional pressures, inadequate preparation, and the lesser proportion of religious orientation among therapists have limited research into the use of and efficacious effects of spiritual engagement (Eck, 2002). Eck suggested that spiritual engagement can change and transform individuals not only through an improved relationship to God but also through enhancing community relationships and developing character both of which are dimensions of authentic leaders. The ability of spiritual engagement to promote authentic leadership behaviors indicates that this research study should reveal a positive relationship between the authentic leadership and spiritual engagement constructs. Such research answers Eck's call to

understand the effects of integrating spiritual engagement, albeit in the organizational leadership setting rather than the clinical environment.

In exploring recent workplace spirituality interest, Garcia-Zamor (2003) observed that the code of conduct that defines ethical behavior in organizations requires integrating moral standards of good and evil that are often sourced in individual spirituality. In addition, spirituality can provide purpose for work and enhance satisfaction and peacefulness (Garcia-Zamor, 2003). Garcia-Zamor suggested that the integration of spirituality and work life provide the ethical guidance and purpose that leads to greater performance and higher moral outcomes that support the objective of this research to examine the effects of spirituality efforts within organizational leadership.

Sanders (2007) included a discussion of spiritual engagement through prayer in his leadership book and argued that prayer sharpens moral vision, provides courage, reveals wisdom, clarifies choices, and deepens one's relationship with God. The development of inner strength and clarity through the spiritual engagement practice of prayer supports spiritual engagement as a useful construct toward developing important leader characteristic and reinforces the use of spiritual engagement as a leadership antecedent for this research.

Within the theoretical development of spiritual leadership theory, Fry (2003) argued that core beliefs form higher order motivations that drive behaviors. For the leader seeking to align espoused and in-use behavioral theories resulting in authentic leadership characteristics, engaging core beliefs, the spirit, and heart as well as intellect and values is necessary to cement the core motivations for effective behavior (Fry, 2003). Fry observed that leaders seeking to promote workplace spirituality among other efforts must pursue ongoing spiritual engagement. The observations relative to spiritual engagement and the importance of core beliefs within Fry's theoretical development of spiritual leadership support the inclusion of spiritual engagement as a meaningful variable for research into leader behaviors and indicate that this research should find a positive relationship between spiritual engagement and authentic leadership characteristics.

In a theoretical review of the state of spirituality in the workplace, Marques et al. (2005) reviewed prior theoretical work with the objective of identifying a comprehensive definition and model of workplace spirituality, suggesting practical strategies for advancing spirituality in organizations, and proposing future research opportunities. In the process of their review, Marques et al. identified useful effects of spirituality, including clarification of purpose for work, greater connectivity with others in the organization and society as a whole, an ethical foundation, increased work and life satisfaction, greater self-esteem among organizational members, enhanced trust across the group, and a greater sense of peace derived from increased individual spirituality. The theoretical individual benefits of enhanced spirituality in the work role suggested by Marques et al. support the examination of spirituality-enhancing spiritual engagement as an antecedent to improved leadership as proposed by this research study.

Empirical Studies of Spiritual Engagement Constructs in Organization and Leadership

In examining religious effects on job satisfaction, Ghazzawi et al. (2012) framed religion as a system concept of feelings, thoughts, and behaviors concerned with the search for the divine, which exhibits significant overlaps with the spiritual engagement construct as defined by Roof et al. (2015) and as used for this research. Ghazzawi et al. used the Religious Commitment Inventory across a population of 408 atheists/agnostics, Buddhists, Christians, Hindus, Jews, and Muslims in Southern California to measure religious intensity and correlated the variable with job satisfaction from the Minnesota Satisfaction Questionnaire finding a positive but weak relationship between religious commitment and job satisfaction. The positive relationship between religious commitment that overlaps some spiritual engagement dimensions and job satisfaction provides support for examining the positive organizational or individual effects of spiritual engagement as proposed for this research.

Neal (2000) suggested, “We are spiritual beings having a human experience” (p. 1316) and reported on 40 formal and over 700 informal interviews on workplace spirituality finding that work among spiritual individuals is selfless,

purposeful, intended to serve others and the divine, and worshipful like prayer. The themes that emerged from exploring spirituality and work were that individual spirituality clarifies the purpose of work as service and defines work as a calling for a greater purpose (Neal, 2000). Neal found among the interviewees that most subjects engaged in spiritual practices daily to activate the positive effects of spirituality within their work environment. The findings that spiritual engagement was widely pursued by those seeking to enhance their individual spirituality and the participants' beliefs that individual spirituality served the purpose of reducing ego, directing individuals toward service, clarifying work's purpose, and serving the divine supports the objective of this research to examine spiritual engagement as important individual variables for advancing positive leadership behaviors.

The definitional and conceptual challenges of emotions and spirituality have inhibited their classification, measurement, and study within organizational science, so Tischler et al. (2002) theoretically explored the effects of emotional intelligence and spirituality on performance deriving a number of proposed theoretical models for future research. Noting that both emotional intelligence and workplace spirituality have definitional conflicts, Tischler et al. presented evidence from the literature that both have been shown to positively impact desirable work outcomes and employee well-being. Relevant to authentic leadership dimensions, prior research has connected spiritual practices to increased self-awareness, strengthened self-identity, positive values, enhanced empathy, and more balanced decision making, according to Tischler et al., which are characteristics that reflect authentic leadership dimensions. Of particular research interest is Tischler et al.'s suggestion that unlike emotional intelligence and IQ, spiritual engagement could affect mental, personality, and emotional traits, which are findings that support the examination of spiritual engagement as an antecedent to authentic leadership since the concept is comprised of value, emotional, personality, and self-awareness components that may be impacted by spiritual engagement.

Further evidencing the influence of spiritual engagement on optimism and overall emotional well-being vital to organizational and leadership success, Ai et al. (2002) studied the effects of prayer among 246 cardiac patients finding positive

relationships with optimism, mental health, coping, and health outcomes. The study population represented crisis or high stress conditions, suggesting that spiritual engagement has specific effectiveness under duress, a typical condition within the leadership setting. The Ai et al. findings further support the examination of spiritual engagement in this study as an influential construct that can be expected to affect organizational behavior and leadership practices.

Conducting a quantitative study of the relationship of the spiritual engagement dimension of prayer with measures of well-being, Whittington and Scher (2010) surveyed 430 participants on their use of and attitudes toward different types of prayer as well as outcomes of optimism, meaning of life, life satisfaction, and self-esteem. Among the six prayer types of adoration, confession, thanksgiving, supplication, reception, and obligatory, the three externally focused prayers that were intended to enhance one's relationship with God all demonstrated consistent positive correlation with the well-being outcomes, while the ritualistic or internally focused prayers exhibited negative or no relationship with the outcomes (Whittington & Scher, 2010). Whittington and Scher examined only one dimension of spiritual engagement but did explore a variety of types of the spiritual practice of prayer as related to various well-being outcomes. The Whittington and Scher results demonstrated support for the efficacy of these spiritual engagement constructs and supported the use of spiritual engagement as a positive antecedent for individual and leadership self-development and internal leader characteristics as proposed in this study.

Bade and Cook (2008) also examined the impact of the spiritual engagement dimension of prayer through an exploratory survey of 36 participants using an open-ended question on how prayer was used in coping with difficulties. The resulting items were collected and a concept map developed that identified how prayer assisted with emotions management similar to contemporary emotional intelligence concepts (Antonakis, 2004), aided in problem engagement or resolution guidance, and assisted in perspective realignment when facing difficulties (Bade & Cook, 2008). The Bade and Cook study supports the usefulness of prayer to connect with God, strengthen emotional and rational

resources, and expand personal coping mechanisms. The coping and resource attributes of the spiritual engagement dimension of prayer suggested by Bade and Cook support the examination of spiritual engagement as an antecedent to enhanced leadership effectiveness as proposed within this research.

Laird et al. (2004) developed and validated the Multidimensional Prayer Inventory, which was designed to measure the frequency, type, and underlying beliefs of the spiritual engagement dimension of prayer. The resulting instrument used quantitative and qualitative measures of prayer, and Laird et al. found support for convergent and discriminant validity. In the theoretical development and validation process, the Laird et al. analysis discovered prayer was effective in coping with stress, handling grief, dealing with physical pain, clarifying purpose, promoting well-being, enhancing resilience, and increasing hope. The effectiveness of the spiritual engagement dimension of prayer for emotional strengthening and bolstering personal resources supports the selection of spiritual engagement and specifically the prayer dimension as a variable likely to relate to leader effectiveness within this study.

In exploring pastoral burnout as an undesirable condition that interferes with health, performance, and retention, Chandler (2009) surveyed 270 pastors to examine potential mitigating factors including spiritual disciplines of prayer, meditation, worship, solitude, fasting, rest taking, and scripture study as well as social support systems. Survey items included 43 researcher-designed items, and, while no single spiritual discipline emerged as a burnout deterrent, Chandler found support for the relationship between rest taking and burnout among other social and work-demand factors. Further investigation into the relationship between burnout and factors including spiritual practices was suggested as the research was limited by the great number of independent variables, the survey's use of custom survey items rather than a validated instrument, and limited investigation into the quality of the preventative practices, which, if expanded, could yield further insight (Chandler, 2009). My research design as proposed uses the SpEI as a validated instrument, which measures practices and surrounding attitudes to examine the relationship of spiritual engagement and leadership including evaluating the

emotional leadership dimensions reflected in burnout, thereby responding to Chandler's call for further investigation.

Chandler (2010) conducted a qualitative study interviewing eight pastors and applied inductive analysis to explore what spiritual practices and factors contributed to the prevention of burnout and promoted emotional and spiritual wellness of pastors. The research used open-ended structured interviews and textual analysis to reveal themes within the data. All participants identified spiritual practices as connected to their spiritual, emotional, and physical well-being, which specifically included prayer, scripture study, personal worship, and rest (Chandler, 2010). Chandler concluded that spiritual vitality was an essential ingredient for effectiveness, well-being, health, and resilience, which supports the hypothesis within this research that spiritual engagement will be positively related to authentic leadership through the essential spiritual and emotional well-being leader dimensions.

The Authentic Leadership–Spiritual Engagement Relationship

Throughout the literature, studies reveal connections between dimensions of spiritual engagement or spirituality and authentic leadership characteristics. A sampling of studies supporting the spiritual engagement–authentic leadership connection through identity, integrity, inner-awareness, humility, and esteem are described followed by a section of literature focused on support for authentic leaders' resourcing through spiritual engagement and a grouping of studies examining the moral/ethical connections between spiritual engagement and authentic leadership.

Spirituality/Spiritual Engagement Dimensions Related to Authentic Leadership

In an essay that examined the relationship of spirituality to leadership and organizations across sociological, psychological, and stylistic environments, Burke (2006) suggested that rational leadership that focused on performance and economics limits the organization to past paradigms of power and purpose, while engaging a spiritual ontology offers a humanistic, authentic leadership model. Such a spirituality-grounded leadership approach is holistic, integrating true meaning and

purpose, creating trusting relationships, and causing a genuine shift in power and values (Burke, 2006), which Yukl (2010) argued are fundamental elements of the normative, ethical class of leadership models including authentic leadership. If a connection between spirituality and the intent of the new ethical leadership approaches such as authentic leadership described by Burke exists, this research should find a positive relationship between the spirituality-focused spiritual engagement construct and authentic leadership.

Conger (1994) prefaced the collection of essays on workplace spirituality with the observation that many management and leadership writings that promoted vision, empowerment, and enhanced work life also contained hidden spirituality dimensions. Exploring the intersection of spirituality and organizational leadership, Conger posited that leadership must be more internally influenced than historically recognized and argued the importance of spirituality in identity formation as an essential element of authenticity in leadership. McDermott's (1994) chapter examined how leaders can develop their spirituality and ensuing leadership resources using spiritual exercises, which result in leaders who are abler to exhibit the behaviors and relationships inherent in values-based leaders such as authentic leadership. The theoretical relationships between leadership dimensions of identity, resources, and relationships with spiritual identity (Conger, 1994) along with the identified potential to grow spirituality through spiritual exercises (McDermott, 1994) suggests this research should find a positive relationship between spiritual engagement and authentic leadership constructs.

In reviewing the literature on spirituality in the organization, Craigie (1999) identified spiritual inquiry as vital for leaders and organizations, since employees, leaders, and even organizations had spiritual centers that required nurturing. Leaders, in particular, with a responsibility to promote purpose, values, and meaning, must bolster essential resources through an inward spiritual journey to ensure their own wellness and effectiveness (Craigie, 1999). Craigie posited that such spiritually sensitive leaders operate with confidence directed by values that reflect their core self or authenticity. The leaders' pursuit of spirituality is most effective by experiencing spirituality, rather than simply intellectualizing or

defining the spiritual culture (Craigie, 1999). Craigie's concepts of leaders' spiritual development as an experiential effort, which acts to replenish resources, clarify values and meaning, and allow leaders to operate authentically, supports the hypothesis of this study that experiencing spirituality through spiritual engagement will be found positively related to greater authentic leadership characteristics.

Reviewing spirituality and spiritual ideals ranging from honesty, integrity, values, humility, listening, and respect to more faith-based spiritual constructs and practices, Reave (2005) concluded that there is a clear connection between effective leadership and spirituality dimensions. In examining spiritual practices such as prayer and meditation, Reave found that prior research indicated that spiritual practices result in improved leader performance, resiliency, emotional stability, and self-management, which are fundamentals of authentic leadership. Spiritual practices tended to increase leader integrity, promote trust, strengthen character, and strengthen the leaders' identity resulting in greater espoused and demonstrated values alignment (Reave, 2005). Connecting spirituality and leadership directly, the values strengthening, identity, integrity, self-management and awareness, and moral clarity related to spiritual engagement are all components of authentic leadership (Reave, 2005; Walumbwa et al., 2008). In connecting spiritual practices and authentic leadership, Reave suggested,

Incorporating spiritual values into leadership can bring consistency between the leader's image and identity, allowing the individual to function with a higher level of personal integration. It can also translate into more consistency between inner values and outer behavior [authenticity]. (p. 668)

The spiritual engagement–authentic leadership connection Reave identified across the literature indicates that this research should find a positive relationship between the leaders' level of spiritual engagement and follower-reported authentic leadership characteristics as hypothesized in this research proposal.

Sheep and Foreman (2012) argued that spirituality and identity were both central to the human condition and must be considered in any study of individuals or organizations. The relationship between identity and spirituality is formed by their shared ontological concepts, in that they create the basis for individuals to

answer who they are and what is reality (Sheep & Foreman, 2012). Sheep and Foreman noted that both concepts also have been shown related to meaningful outcomes including commitment, turnover, organizational citizenship behavior, and performance. The development of spirituality through spiritual engagement, therefore, will affect the related individual identity in leaders through the interrelationship of the constructs and by the integration of spirituality within individual identity, according to Sheep and Foreman's theoretical treatise. The Sheep and Foreman theoretical work on integration of identity and spirituality supports the relationship between spiritual engagement and authentic leadership as hypothesized for this research.

Followers' implicit leadership theories can affect leadership effectiveness, and Kriger and Seng (2005) compared the implicit leadership theories across the religious traditions of the five major religions to derive a contingency theory of leadership based on values, vision, and internal meaning rather than behaviors. The sense-making that religion-driven spirituality provides the leader was argued by Kriger and Seng to be the source of the subtle feelings, intuitions, and thoughts that influence the complex leadership process through the leaders' worldview. Individual spirituality as an inner force influences leaders' ethics, attitudes, and authentic behaviors creating truth-based relationships with followers and using collective intellect, feelings, and behaviors to create community and purpose within a complex ontology that includes spirituality influences (Kriger & Seng, 2005). The theoretical connection of religion, implicit leadership theories, and influence on leaders and their effectiveness supports the expected relationship between spiritual engagement and the resulting spiritual transformation and the practice of the ethical, self-aware, normative authentic leadership practices.

Issler (2009) explored the nature of beliefs, how they affect the alignment of will and action, and the importance of intentionally shaping core beliefs to avoid the unintended consequences of beliefs shaped instead by social construction. The effects of beliefs on behaviors are a function of three dimensions—the content of the belief, the strength of the conviction, and the centrality of the belief within one's value system (Issler, 2009). The dimensions of beliefs offer insight into the

mechanisms by which spiritual engagement influences the beliefs that drive values and resulting behaviors in leaders. Issler identified the ability of beliefs to direct behaviors as the reason inner formation through spiritual engagement can be so influential and as how spiritual engagement sustained over time can change core beliefs dimensions and resulting behaviors. Since core beliefs influence authentic behavior and spiritual engagement serves a role in intentionally shaping core beliefs, this study should find that spiritual engagement positively relates to authentic leadership measures.

Noting that the most admired leaders are those with elevated principles, values, and consciences, Giacalone and Jurkiewicz (2003) examined the state of workplace spirituality through a series of 32 book chapters. Exposing a plethora of workplace spirituality theory, although much of it is in early concept stage and lacks well-developed support, Giacalone and Jurkiewicz called for replacing rhetoric with objective scientific research based on sound, clear definitions of the constructs of interest and precise, validated instruments. Giacalone and Jurkiewicz identified 12 specific hypothetical connections between workplace spirituality and constructs of interest in organizational research, including the relationship between ethics, ethical decision-making, and spirituality and whether spiritual employees possessed a unique or specific leadership style (p. 21). This research addresses those hypothetical relationships and the call for greater empirical inquiry with particular focus on the question of whether there exists a relationship between leaders that are more spiritual and their leadership style.

Gould (2005) explored psychological strategies for changing behavior and argued that spiritual exercises, a core dimension of Roof et al.'s (2015) spiritual engagement, accessed an individual's foundational character and created moral development rather than simply modifying behavior. The spiritual formation resulting from spiritual exercises "is a process of re-making oneself that involves de-conditioning unconscious negative dispositions and re-conditioning our hearts with positive inclinations" (Gould, 2005, p. 141). The spiritual strategies directed at transforming internal perspectives yield true development resulting from new selves with altered core motivations, inner beliefs, and implicit decision models

(Gould). Behaviors that result from authentic values rather than purposefully modified behavior represent authentic leadership (Avolio & Gardner, 2005), so this study should find a positive relationship between the spiritual development strategies captured within the spiritual engagement construct and follower-perceived authentic leadership.

Stonecipher (2012) conducted a study of the relationship between the Social Change Model of Leadership comprised of eight values, including “consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change” (p. 90), and the student’s spiritual quest. Drawing on data from the Multi-Institutional Study of Leadership from 2010, 509 participants were included who responded to the spiritual substudy, and the analyses found positive correlations between the measure of spiritual quest and all eight of the measures of the Social Change Model of Leadership (Stonecipher, 2012). Stonecipher suggested that a more effective approach to leadership development should incorporate spiritual development and observed that the authentic leadership construct, a theory of recent interest, specifically emerges from the leader’s spiritual center. This research should find a positive relationship between the spiritual development construct of spiritual engagement (Roof et al., 2015) and authentic leadership mirroring Stonecipher’s results, indicating a similar relationship between similar constructs.

In developing the theoretical support for their research into the relationship between religion- and job-related values and attitudes, Chusmir and Koberg (1988) argued that religious affiliation and strength of conviction is part of an individual’s personality and identity, which form the authentic or genuine self of the authentic leader. Examining the theoretical connections between spirituality and leadership, Korac-Kakabadse et al. (2002) also identified spirituality as core to the leaders’ consciousness and a discoverable approach that formed the basis for the underappreciated intuitive activities of leading, the fundamental connectedness with followers, balanced leadership, genuine empowerment, servanthood, compassion, and humility. Leadership grounded in personal identity or consciousness, connectedness, and such altruistic values reflects the self-awareness,

transparency, and internal moral compass within the authentic leadership construct (Avolio & Gardner, 2005; Walumbwa et al., 2008), and if the underlying identity is discoverable through and influenced by spiritual engagement, a relationship between spiritual engagement and authentic leadership should be found in this research.

Sherman (2005) examined the spiritual engagement of “Sabbath rest,” defined as time dedicated to communing with God and community resulting in enhancing one’s relationship with the divine, wisdom, humility, and self-awareness. In exploring spirituality in the workplace and developing a questionnaire to capture workplace spirituality, Ashmos and Duchon (2000) proposed that spirituality nourishes the inner life offering clarity on identity, meaning making, and community connections. In a theoretical treatment of spirituality’s place in leadership, Hoppe (2005) posited spiritual integration as developing inner self, meaning, wholeness or integration, moral clarity, and spiritual connectedness, resulting in a more authentic leader. The Sherman, Ashmos and Duchon, and Hoppe studies that found spiritual engagement and pursuit of spirituality connected with authentic leadership through enhanced identity, self-awareness, relationship transparency, and inner wisdom collectively suggest that a positive relationship between spiritual engagement, including the rest dimension of Sherman’s research, will be found positively related to authentic leadership.

Karakas (2010) advanced benevolent leadership theory and developed the Benevolent Leadership Scale, which included a dimension of spiritual depth that focused on the inner self, wisdom, transcendence, and spiritual actions of leaders and which is connected to the other dimensions of morality, positive psychology-related vitality, and community citizenship. The spiritual depth dimension of the Karakas theoretical development that includes inner spirituality attributes such as those resulting from spiritual engagement was connected within benevolent leadership to characteristics similar to those of authentic leadership, including the moral perspective, self-awareness, and relational transparency dimensions. The spirituality–authentic leadership connections supported by Karakas lend support for

the hypothesized positive relationship between spiritual engagement and authentic leadership proposed within this research.

Seeking to answer whether spirituality and leader effectiveness were connected, Strack and Fottler (2002) argued that effective leadership was in fact “grounded in the spiritual dimension of the individual leader” (p. 4). The leaders’ spirituality included a connection to the divine that translates into thoughts, emotions, and actions and was reflected in spiritual engagement practices such as meditation and prayer (Strack & Fottler, 2002). Strack and Fottler described spirituality as related to morality, a fundamental dimension of the leader, which provided identity and influenced meaning, outlook, energy, morality, and purpose resulting in actual behaviors. The awareness, identity, moral perspective, and balanced behaviors within Strack and Fottler’s theoretical leader spirituality relate to authentic leadership dimensions, and the active spirituality component of spiritual engagement posited suggests that this research should find a positive relationship between spiritual engagement and authentic leadership measures.

Komala and Ganesh (2007) surveyed 222 healthcare professionals in India to examine the relationship between workplace spirituality, job satisfaction, and burnout finding significant positive relationships between spirituality and satisfaction and negative correlation between spirituality and burnout. The integration of spiritual values as theorized within Komala and Ganesh’s study was perceived to influence behavior and interpretations of events, resulting in an alignment of values and behaviors yielding authenticity. The Komala and Ganesh research supported the importance of studying spirituality as related to desirable organizational outcomes and provided further theoretical support for the connection of spiritual dimensions and authentic leadership behaviors through increased behaviors–values alignment, a relationship that should yield a positive relationship between spiritual engagement and authentic leadership within this study.

Spiritual Engagement and Resources for Authentic Leadership

In a study of one of the dimensions of spiritual engagement, prayer, as related to health among 1412 pastors, Meisenhelder and Chandler (2001) found a significant positive relationship with vitality, general health, and mental health as

self-perceived. Vitality reflects energy and a positive mental outlook or optimism suggesting that the emotional intelligence to support relational transparency, and balanced processing dimensions of authentic leadership are positively related to spiritual engagement through prayer and such a relationship should be empirically supported within this research.

In exploring how God shapes leaders' hearts through culture, calling, community, communion, conflict, and commonplace, McNeal (2000) identified the importance of spiritual engagement as "deposits into the relationship bank with the Almighty" (p. xiii) and vital for shaping the leader's soul, providing moral wisdom, and avoiding "faux leadership" (p. 139) as opposed to authentic leadership. Leaders who neglect spiritual engagement cannot operate with humility, purpose, servanthood, and self-knowledge (McNeal, 2000). The authentic leadership related characteristics including self-awareness, humility for balanced processing, and wisdom for moral guidance and relational transparency were suggested by McNeal as resulting from an active spiritual engagement life, and those theoretical connections should support a finding of positive correlations between spiritual engagement and authentic leadership within this research study.

Vasconcelos (2010) conducted a phenomenological study of 28 Brazilian participants across faith traditions and industries using email interview questionnaires to investigate spiritual engagement using prayer and perceived results. Participants reported that the communion with the divine improved their performance effectiveness, reduced negative emotions, deepened collegial relationships, and supported more effective decision making. This study should reflect the more balanced processing in decision making and improved relational transparency revealed by Vasconcelos' study through a positive relationship between spiritual engagement and authentic leadership.

In a study to develop a spiritual transcendence instrument, Piedmont (1999) suggested that divine encounters such as those actualized through spiritual engagement result in a fresh objective perspective, comfort with ambiguity as would be necessary in balanced processing, more transparent and empathetic relationships, and a moral guidance that influenced individuals beyond the five-

factor personality dimensions. Piedmont argued that the influence of such resulting spiritual transcendence was impactful enough to warrant its consideration as a sixth personality factor. This proposed empirical research should similarly reveal the effects of spiritual engagement on authentic leadership constructs of relationship, balanced processing, moral insight, and self-awareness described by the Piedmont study.

Internal Moral Perspective and the Spiritual Engagement–Authentic Leadership Link

In a university study of 162 participants examining the relationship between personal religiousness and ethical judgements, Clark and Dawson (1996) found significant differences when evaluating ethical scenarios. Personal religiousness and individual spirituality are social forces that influence moral viewpoints (Clark & Dawson, 1996). Ethical theory and the resulting moral judgements are based on deontological and teleological concepts; that is, absolute truths such as those inherent in faith-based worldviews, reasoning, and human consequences suggest that ethical judgements and the foundational internal moral perspectives are at least partly shaped by religious or spirituality constructs (Clark & Dawson, 1996). Religiousness for the study was defined as belief in and a commitment to adhere to the guidance of God (Clark & Dawson, 1996), reflecting a construct that would be expected to be influenced by the transformational effects of spiritual engagement. The ethical judgement scenarios that were employed assessed the participants' internal moral perspective, a dimension of authentic leadership (Walumbwa et al., 2008) supporting the hypotheses for this research of a positive relationship between spiritual engagement and authentic leadership.

Fernando and Jackson (2006) examined the relationship between religion-based spirituality and decision making through a qualitative case study methodology of 13 leaders across four major faith traditions—Buddhist, Christian, Hindu, and Muslim—in a Sri Lankan population. Based on literature suggesting individual spirituality is most often based in religious values and faith traditions, Fernando and Jackson expected that the semistructured interviews would reveal a connection between faith-driven intuitive decision making based on higher moral

standards. Participants indicated that they engaged in spiritual practices such as meditation or religious traditions regularly. Results revealed that in making difficult decisions, leaders invoked faith-based truths and spiritual guidance, which suggests this proposed quantitative research study should find a positive relationship between spiritual engagement and authentic leadership as internal moral perspectives are strengthened through spiritual engagement.

In a conceptual study of the relationship of spirituality and spiritual leadership to other contemporary leadership theories in secular organizations, Crossman (2010) identified an increased interest in spirituality and leadership that resulted from a need to elevate organizational ethics and suggested that values-based leadership models and spirituality were related through a moral foundation. Crossman proposed that many leaders perceived that their identities were deeply connected to their spirituality and, therefore, that leaders who are more spiritual would exhibit greater transparency and relational capacity reflective of increased authentic leadership concepts of balanced processing and relational transparency (Walumbwa et al., 2008). This research should discover increased moral perspective as well as greater relational and inclusionary attributes associated with spirituality as theorized in Crossman's article suggesting a positive relationship between spiritual engagement and authentic leadership.

In wide-ranging studies of relationships of religion and spirituality in the leadership arena, connections of spirituality with ethics, morals, and related sense making have been posited. Escobar (2011) invoked lessons from the Book of Amos in the Old Testament, arguing that leadership ethics are inseparable from the leader's spirituality and identity as demonstrated by Amos' character. In an article on conflicting issues surrounding religion in the workplace, Ettorre (1996) noted, "Religion is most certainly a factor in shaping values and ethics" (p. 16) and represents employees' deepest selves. In examining how spirituality influenced strategic leader decision making, Phipps (2012) suggested that spirituality, including religious-based elements, operated as a schema that filtered information through ethical and values judgements. Solomon and Hunter (2002) suggested that from a psychological perspective spirituality as personally integrated provides

leaders with a moral framework that guides their relationships, more inclusive decision making (more balanced processing), and humility. An extensive qualitative study of a nursing home environment involving over 200 hours of data collection including observation, participation, interviews of 34 participants, and reviewing documents was performed by Sass (2000) finding deep connections between spirituality and the organization's culture. Sass concluded among other findings that intentional spiritual engagement, guided by the values and practices of leaders, reinforced spirituality throughout the organization. The referenced variety of studies of religion, spirituality, and leadership have supported the relationship between spiritual engagement affected spirituality with leaders' moral perspectives and resulting actions, which in this research study should manifest as a positive relationship between spiritual engagement and authentic leadership.

Summary

The literature reviewed within this chapter included empirical and theoretical support across a broad range of populations and perspectives for the relationship between spiritual engagement and authentic leadership. Spiritual engagement is an active, transformational construct encompassing spiritual practices, attitudes, and beliefs that collectively strengthen the divine relationship and transformed the individual. The faith-informed reciprocal spiritual engagement process includes fasting, meditation, worship, and spiritual rest in a complex, reciprocal, active transformation. Authentic leadership reflects the inner self of the leader and exhibits characteristics of balanced processing, self-awareness, internal moral perspective, relational transparency that reflects emotional intelligence, a strong sense of identity, and robust mental and emotional resources (Issler, 2009; Posner, 2009; Walumbwa et al., 2008; Yukl, 2010).

Spiritual engagement is an early-stage construct reflecting spiritual practices, beliefs, and attitudes that enhance individual spirituality and promote communion with God, and authentic leadership is likewise an early-stage construct, so no prior research has specifically examined the relationship between the concepts, but sound theoretical support for such a relationship exists across the

literature. The select literature introduced within this chapter offers robust support for the hypotheses that this research will find support for positive relationships between the spiritual engagement dimensions of worship, meditation, fasting, and rest with authentic leadership. Chapter 3 details specific methods for researching the relationships.

Chapter 3 – Methods

This chapter provides details on the methods used to examine the spiritual engagement–authentic leadership relationship, including testing the 10 research hypotheses listed and depicted in Figure 1. Measuring attitudes and perceptions such as those of spiritual engagement and leadership style, Cabanda, Fields, and Winston (2011) recommended survey research as an appropriate and effective method for data collection, and the cross-sectional research design allowed for practical and effective investigation of the constructs and relationships. A diverse population that represented varying spiritual engagement characteristics and was adequate to provide at least 60 valid leader surveys and their corresponding followers' surveys was recruited to complete validated instruments via an online survey system. Analysis examined social desirability influences and potential demographic confounders of age and gender and used multiple regression for hypotheses testing and differences and other post hoc testing to examine group differences for interpretation. The sections on Research Design, Measures, Population and Sampling, Data Collection, and Analysis describe details of the study methodology.

The socially desirable response and demographic influencers hypotheses were as follows.

- H₁^a: There is not a significant difference in leader reported worship based on number of extreme social desirability responses.
- H₁^b: There is not a significant difference in leader reported meditation based on number of extreme social desirability responses.
- H₁^c: There is not a significant difference in leader reported fasting based on number of extreme social desirability responses.
- H₁^d: There is not a significant difference in leader reported rest based on number of extreme social desirability responses.
- H₂^a: Authentic leadership is not significantly associated with leaders' age.
- H₂^b: Authentic leadership is not significantly different between leaders' gender.

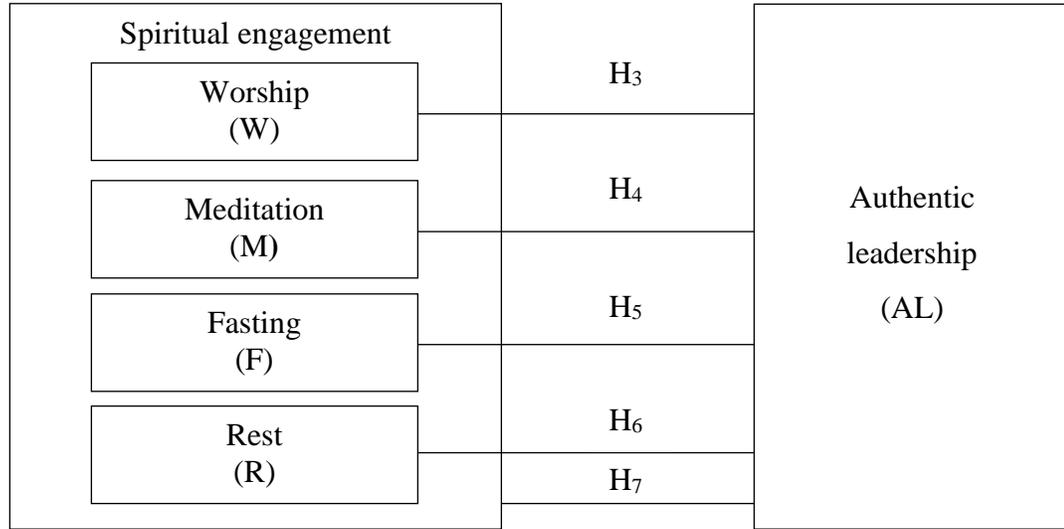


Figure 1: Relationship of spiritual engagement dimensions and authentic leadership in the research hypotheses.

The research hypotheses were as follow:

- H₃: Worship (W) will be positively associated with follower reported authentic leadership (AL).
- H₄: Meditation (M) will be positively associated with follower reported authentic leadership (AL).
- H₅: Fasting (F) will be positively associated with follower reported authentic leadership (AL).
- H₆: Rest (R) will be positively associated with follower reported authentic leadership (AL).
- H₇: Worship (W), meditation (M), fasting (F), and rest (R) will significantly predict follower reported authentic leadership (AL)

Research Design

My research was a quantitative, nonexperimental, cross-sectional survey-based study using participants from a variety of organizational settings in the United States. Creswell (2009) suggested that such a survey methodology is an effective method for collecting complex, attitude- and perception-based constructs from which to test hypotheses and generalize to associated populations while offering economy and practicality of data collection. The spiritual engagement and

authentic leadership variables for the research were both measures of perception and attitude supporting the use of survey methodology. Validated instruments were used to collect responses through web-based surveys. Leader and follower participants were volunteers, and all followers of each leader were solicited. Independent and dependent variable data were collected from different participants, independent variable data from leaders, and dependent variable data from multiple followers, so common method variance was not considered an issue (Podasakoff et al., 2003). The nature of spiritual engagement, the level of which may be perceived as socially desirable within some social settings, had potential for social desirability bias, so the Socially Desirable Response Set Five-Item Survey (SDRS-5; Hays et al., 1989) items were included and transformed for use in initial hypotheses testing as I explain further in the measures section.

Karakas (2010) observed that spirituality definitions were abundant and varied greatly ranging from New Age to orthodoxy, and Caza et al. (2010) noted that authentic leadership as a relatively early stage theory also was subject to varying conceptualizations. My research examined the spiritual engagement–authentic leadership relationships through the lenses of Roof et al.’s (2015) spiritual engagement construct and Walumbwa et al.’s (2008) authentic leadership definition as detailed in Chapter 2 and as captured using the instrumentation described in the methods section of this chapter. Demographic variables were included for deeper understanding of potential influencers of the spiritual engagement–authentic leadership relationship being studied.

Measures

Girden and Kabacoff (2011) argued that an important element of quality research is the use of valid, reliable instruments that reflect the theoretical construct of the research design and hypotheses to be tested. While as early-stage concepts, the research variables of authentic leadership and spiritual engagement have varying definitions (Caza et al., 2010; Roof, 2014; Roof et al., 2015), the instrumentation I chose for this research reflected the specific construct definitions and hypotheses to support the study research purpose and design and are validated

existing instruments that reflected the specific variable definitions. I also identified and included theorized variables from the literature that were potentially influential and included for the leader surveys a social desirability scale, the SDRS-5, to assess potential confounding factors that could affect the spiritual engagement–authentic leadership relationship of interest. Demographics were included to allow assessing the population representativeness and to facilitate any post hoc investigation that was suggested by the analysis.

Spiritual Engagement Instrument (SpEI)

Spiritual engagement represents the transformative concept of behaviors, attitudes, and beliefs that can strengthen spirituality while further developing the beliefs and attitudes that motivate spiritual practices. The SpEI recently developed and validated by Roof et al. (2015) was designed to measure the specific concept that forms the research question and hypotheses for the study and was used as the instrument for capturing independent variable data. The instrument is included as Appendix A. The Roof et al.-developed SpEI is a four-factor instrument comprised of worship, meditation, fasting, and rest that collectively explained 85.24% of the variance in the instrument’s development sample. Convergent validity was supported by the SpEI’s significant correlation with related measures of spirituality and religiousness, including the Daily Spiritual Experience Scale (Underwood & Teresi, 2002) and the Brief Multidimensional Measure of Religiousness/Spirituality (Fetzer Institute, 2014). Reliability was supported in the instrument development sample with Cronbach’s alpha values ranging from .94 to .99 for each of the four scales (Roof et al., 2015). The instrument included five items for each of the four factors, 20 items total, and leader participants completed the ratings using a 6-point Likert response scale. The SpEI was designed to be faith-neutral, and survey instructions encouraged participants to interpret the items and respond within their own faith traditions or worldview. The SpEI is freely available for research use.

Authentic Leadership Questionnaire (ALQ)

Authentic leadership was the dependent variable, and the ALQ as developed by Walumbwa et al. (2008) was used. The ALQ is a 16-item questionnaire that uses a 5-point scale to describe leader behavior frequency. Appendix B depicts sample

items from the ALQ. The ALQ is relatively new but has been used and validated across various cultures and found to exhibit sound psychometrics, validity, and reliability (Roof, 2014). Roof (2014) examined the ALQ's psychometrics across 11 studies and concluded that the studies and original development evidence supported face, content, convergent, discriminant, and nomological validity as confirmed both theoretically and through widespread analysis of the instrument using confirmatory factor analysis. The ALQ was developed to capture the four theoretical first-order constructs of authentic leadership, self-awareness, balanced processing, internal moral perspective, and relational transparency (Walumbwa et al., 2008), but support for the discriminant validity of the first-order factors has been inconsistent (Roof, 2014). The aggregate second-order concept of authentic leadership was used for hypothesis testing in this research due to widespread support across a wide range of studies (Roof, 2014) and captures the relevant concepts needed to address the research question and associated hypotheses. The instrument also includes the ethical component of authentic leadership necessary to support the authentic leadership definition adapted for this study. Because it is a copyrighted instrument, permission for use of the ALQ for this study has been secured.

Social Desirability and Demographics

Prior research and theoretical development related to spirituality, spiritual practices, and leader and organizational outcomes have identified variables that have or may affect the spiritual engagement relationship with authentic leadership including age (Chandler, 2009; Marschke et al., 2011; Meisenhelder & Chandler, 2001) and gender (Bussing et al., 2005; Meisenhelder & Chandler, 2001; Underwood & Teresi, 2002). In addition, demographics including religious affiliation, type of organization (Bussing et al., 2005; Vecchio, 1980; Whittington & Scher, 2010), marital status (Bussing et al., 2005), and race (Underwood & Teresi, 2002) were collected and analyzed for representativeness, generalizability, and understandability of the study results.

Spiritual engagement encompasses attitudes, beliefs, and behaviors that some participants, such as those with religious traditions that incorporate spiritual practices or related rituals, may view as socially desirable. To assess the effects of

social desirability bias among leaders responding to the SpEI, the SDRS-5 (Hays et al., 1989) was included in the leader participants' surveys by interspersed items amongst the SpEI items. The SDRS-5 uses the tendency by respondents to select extreme answers on unrelated socially desirable questions to detect individual bias (Hays et al., 1989). To minimize participant detection as employed by Manson and Carr (2011) and recommended by Hays et al. (1989), SDRS-5 items were matched to the same 6-point scale as the SpEI. The online survey for leaders also included instructions designed to encourage responses that reflect actual rather than "expected" spiritual engagement to minimize social acceptability influences. Appendix C contains the SDRS-5.

Population and Sampling

The sample was drawn from organizations and individuals who agreed to participate in the study and provide email information for both leader(s) and all of their associated followers. All followers identified for each leader were included in the survey, and their responses were averaged during analysis to capture any variance in follower-perceived authentic leadership characteristics. A variety of commercial, ministry, and ecclesiastic organizations were selected based on expectations that a significant portion of the leader population are likely to understand spiritual engagement constructs due to the culture, history, or mission of the organization. In addition, participants were solicited directly who were also those likely to understand spiritual engagement concepts. Drawing participants from a variety of sources attempted to provide variation in demographic and response characteristics to support valid analysis, difference examination, and generalizability to a wide range of organizational populations. To support four independent variables, a minimum sample size of 15-20 participants per variable for multiple regression as suggested by Hair et al. (2010) resulted in 60 to 80 usable leader surveys needed for analysis.

Data Collection

Separate surveys for leader and follower populations were hosted on the Fluidsurveys platform, which presented the surveys, collected data, and supported

export to SPSS and Excel for further examination and analysis. Survey links were provided for each leader with organizational groups and all follower participants receiving individualized survey links, causing response data to contain email addresses and allowing linking of leaders and their followers during initial data preparation. The ALQ conditions for use restrict general access to the instrument, so the personal follower links limited access to the Fluidsurveys-hosted survey satisfying the usage agreement conditions. Survey content contained the four-factor SpEI for leaders, the ALQ for followers, demographic variables for both groups, and the SDRS-5 for leaders integrated into the survey items. The email solicitations to individual participants included explanations of the purpose of the research, clear explanations of survey confidentiality, the volunteer nature of survey response, and encouragement to contribute to the survey accuracy with candid responses.

To increase response rates, techniques recommended by Anseel, Lievens, Schollaert, and Choragwicka (2010) were to be adapted when appropriate, including (a) emailing advanced notification of the survey request by the organizations' management to those solicited from participating organizations, (b) follow-up contact with any participants who had not responded after a week, (c) personalization of the initial invitation to participate, (d) drafting of the initial organizational email invitations to communicate organizational support, and (e) a drawing for \$100 Amazon gift cards was added as a financial incentive for survey completion in order to achieve more than 60 usable leader surveys.

Analysis

Data analysis involved four major phases: (a) initial data examination and preparation, (b) computation of scale reliability and variable correlations, (c) hypothesis testing of social desirability and potential confounders as defined in H₁ and H₂, and (d) multiple regression for hypothesis testing. SPSS 23.0 was used for advanced data analysis.

Initial Data Examination and Preparation

Response data were imported from FluidSurveys into SPSS and an Excel spreadsheet for ease of analysis and examination. The leader was identified and

added to each follower survey response data record by matching the leader email addresses used to distribute the surveys. The association of the leader name with each follower facilitated further analysis and supported the later averaging of the authentic leadership rating for each leader. Leader and follower responses were reviewed for completeness, missing data evaluated for any discernible pattern or bias, and appropriate actions performed. Missing data that appeared to be random or bias-free resulted in elimination of participants and, in the case of missing leader data, removal of their corresponding followers' data. Once missing data issues were resolved, follower authentic leadership data for each leader was averaged and the average data integrated into the leaders' spiritual engagement and demographic data record, resulting in SPSS data containing all independent, dependent, and demographic data. After data was initially reviewed and integrated, raw data files were securely stored and individual identifiers removed from working data files. Composite variables for authentic leadership and for the four spiritual engagement factors of worship, meditation, fasting, and rest were created. A social desirability factor variable was computed to determine the number of socially desirable extreme answers by each leader, resulting in a value of 0 to 5 for each leader participant. The use of only extreme answer scoring follows the recommendations of Hays et al. (1989).

Descriptions were generated for the sample demographics, and characteristics were examined for representativeness and generalizability of the study. Outliers have the potential to overly influence empirical results (Hair et al., 2010), so the spiritual engagement and authentic leadership variable data were examined using descriptive statistics and 5% trimmed mean analysis (Pallant, 2010). Outliers were evaluated to determine if they were useful, valid population characteristics or aberrations to be removed using guidance from Hair et al. (2010). Normality of the authentic leadership data was explored using normality graphs, skewness and kurtosis values, and the Kolmogorov-Smirnov test of normality (Hair et al., 2010; Pallant, 2010; Tabachnick & Fidell, 2001). With the sample size, violations of normality assumptions were not expected to have a negative effect on multivariate analyses, but as Tabachnick and Fidell (2001) suggested, any concerns

identified by initial normality examination were followed by evaluating residual normality plots from the computation of an initial regression model.

Computation of Scale Reliability and Variable Correlations

Scale reliability was evaluated by computing the Cronbach's alpha for the four spiritual engagement scales and the authentic leadership scale with expected values to be not less than .7 consistent with prior research findings (Roof, 2014; Roof et al., 2015). Correlation values were also calculated between all variables to provide insight into relationship as well as for later use in assessing multicollinearity.

Testing Social Desirability and Potential Confounders (H₁ and H₂)

A one-way analysis of variance (ANOVA) was employed to evaluate differences in the spiritual engagement measures due to social desirability and test H₁^a-H₁^d. Correlation between years of age and authentic leadership values as previously computed in the initial correlations analysis was reviewed to evaluate H₂^a. Independent-sample *t* tests were computed to assess authentic leadership differences by gender testing H₂^b. To summarize this initial testing, for H₁^a through H₁^d, a one-way ANOVA examined differences in the four spiritual engagement measures by number of extreme SDRS responses (0-5). For H₂^a, age reported in years was analyzed using correlation to determine if the relationship with authentic leadership is significant. For H₂^b, differences in authentic leadership by gender were measured for significance using an independent-sample *t* test.

Multiple Regression for Hypothesis Testing

Hypothesis testing of the four research hypotheses, H₃ through H₆, was performed through the use of correlation analysis with the variables of worship, meditation, fasting, and rest, and authentic leadership. Each spiritual engagement (SpE) variable correlation with authentic leadership (AL) was examined for significance. Testing of H₇ was performed by computing a multiple regression model with the four SpE variables as independent variables and authentic leadership as the dependent variable. The model and the independent variable coefficients were examined for significance to determine support for the H₇ hypothesis. The regression model was also examined to determine whether

multicollinearity assumptions were seriously violated using the collinearity diagnostics provided by SPSS (Pallant, 2010).

Summary

This chapter has provided a detailed methodology that was followed in securing and measuring a useful population and effectively and validly analyzing the resulting data to determine whether the four research hypotheses describing relationships of spiritual engagement and authentic leadership could be supported. Through the analysis process, additional interpretive insights were generated to aid in understanding the results, examining underlying characteristics of the constructs within the surveyed population, and clarifying the generalizability of the findings.

Chapter 4 – Results

This research examined the relationship between spiritual engagement and authentic leadership through a cross-sectional research design with participating leaders from a variety of organizational settings, and this chapter presents the results. Samples were gathered from small private businesses, ecclesiastic organizations, nonprofits, and individual participating leaders and their followers, resulting in 65 valid leader surveys and 266 associated followers, which exceeded the minimum sample size required for the analysis. Response rates for follower invitations were 66.25%, and leader participants from organizational invitations responded at a rate of 75.0%. Many leaders volunteered to participate in response to email, social media, and related invitations, which resulted in leader response rates being unavailable. Gift card drawings were offered to encourage leader participation.

To examine the results of the survey responses and relationships, data analysis was conducted in four progressive phases: (a) initial data preparation and analysis; (b) computation of scales reliability and intervariable correlations; (c) hypothesis testing for social desirability and potential confounding variables influence using appropriate statistical methods of analyses of variance (ANOVA), correlations, and *t* test; and (d) testing the research hypotheses using multiple regression. Additional post hoc testing was also performed to advance the findings of the study further.

Initial Data Preparation

Data were imported from the Fluidsurveys web-based survey system into Excel and reviewed for completeness and valid responses. In addition to the 65 leader and 266 follower usable surveys, only 6 leader and 10 follower surveys were found to have been begun but not finished resulting in missing data. Since no discernable pattern was identified, those surveys were excluded from the remaining analysis. Consolidated variables for the spiritual engagement, authentic leadership, and social desirability instruments were computed, and follower authentic leadership responses were averaged for each leader. Follower averages were

incorporated into each leader record and the raw follower data retained for authentic leader scale interitem correlations-based reliability testing. The complete data files were imported into SPSS 23.0 wherein the remaining analyses were performed.

Population Demographics

Table 1 depicts the demographic characteristics of the leader respondents. Leader participants ranged from 27 to 73 years old with a median age of 52. The leader population was primarily male (73.8%) and almost exclusively Christian (93.8%) and Caucasian (92.3%). Over half of the leader participants were employed in not-for-profits of ministry, education, and church settings (50.8%) with 36.9% of leader participants serving in for-profit businesses.

Table 1: Demographics of Leader Participants

Variable	<i>n</i>	%
Age		
≤ 35	6	9.2
36-45	15	23.1
46-55	19	29.2
56-65	20	30.8
66+	3	4.6
Gender		
Female	17	26.2
Male	48	73.8
Race		
Caucasian	60	92.3
Latino	2	3.1
African American	1	1.5
Native American	1	1.5
Prefer no answer	1	1.5
Marital status		
Single, never married	1	1.5

Variable	<i>n</i>	%
Married	60	92.3
Living with partner	2	3.1
Not currently married or living with partner	2	3.1
Religious affiliation		
Christian–Protestant	26	40.0
Christian–Catholic	5	7.7
Christian–Nondenominational	25	38.5
Christian–Other	5	7.7
Other	2	3.1
Prefer no answer	2	3.1
Organizational type		
For-profit	24	36.9
Not-for-profit	33	50.8
Government	2	3.1
Self-employed, not employed, other	6	9.2

Followers, as summarized in Table 2, were more equally gender distributed with 49.4% male and 43.8% female of those who identified. Followers were also unsurprisingly younger than the leader participants with ages ranging from 23 to 82 and a median age of 45 compared to leaders' median age of 52 years. While also slightly more diverse, followers were still primarily Caucasian (82.4 %) with various other races including 6.7% Latino and 2.2% African American.

Table 2: Demographics of Follower Participants

Variable	<i>n</i>	%
Age		
≤ 25	10	3.7
26-35	45	16.9
36-45	73	27.3
46-55	67	25.1
56-65	35	13.1
66-75	9	3.4
76+	1	0.4
Gender		
Female	117	43.8
Male	132	49.4
Race		
Caucasian	220	82.4
Latino	18	6.7
African American	6	2.2
Asian	4	1.5
Pacific Islander	2	0.7
Other	3	1.1
Prefer no answer	5	1.9

Data Examination

Data were analyzed for suitability in performing planned statistical tests by examining normality and outliers to identify any that may be cause for concern. The dependent variable, authentic leadership, was negatively skewed (-1.06) and peaked with a kurtosis value of 1.81 and the Kolmogorov-Smirnov statistic of 0.02, suggesting normality violation (Pallant, 2010). Since tests of statistical significance used in normality assessments can be greatly influenced by small or large sample sizes, Hair et al. (2010) suggested that researchers supplement tests by examining

graphical plots for assessing normality. An examination of the histogram and Normal Q-Q plots indicated that the data appeared reasonably normal in its distribution. Hair et al. also noted that regression is robust even when normality is violated, so analysis proceeded with the intent to examine residuals of predicted values during regression to further assess the data for any normality violations of concern as suggested by Tabachnick and Fidell (2001).

Authentic leadership and spiritual engagement data were all examined for potentially influential outliers using 5% trimmed mean comparisons and boxplots with very few outliers identified, and, upon review, all outliers were deemed useful representative responses. The preliminary review of the data suggested it was appropriate and suited for the planned statistical analyses.

Reliability and Relationships

An initial examination of the scale interitem reliability and intervariable correlations was performed to assess the suitability of the data for testing hypotheses.

Reliability of Scales

Interitem correlation was used to confirm the reliability of the spiritual engagement scales and authentic leadership measures. Cronbach's alpha values were computed for all instruments with the four spiritual engagement constructs yielding alpha values of .91 for worship, .95 for meditation, .97 for fasting, and .94 for rest from the leader survey data supporting the excellent internal consistency of the scales. The authentic leadership scale exhibited a Cronbach's alpha value of .91 from the follower response set, indicating very good internal consistency.

Correlations

Correlation was computed between all ordinal and continuous variables including the independent spiritual engagement variables, authentic leadership, social desirability, and age to better understand the initial intervariable relationships. Results are shown in Table 3. The initial correlation values indicate multicollinearity between all of the spiritual engagement constructs except between meditation and both worship and rest. If correlation coefficients between

independent variables used in multiple regression are greater than .7, one or more of the variables should be omitted (Pallant, 2010). Since all r values are less than .7, all variables were retained. In addition, none of the four independent variables exhibited significant correlations with authentic leadership with the greatest r value equal to .22, a condition to be examined further in hypothesis testing and post hoc analysis.

Table 3: Interveriable Correlations

Variable	1	2	3	4	5	6	7
1. Worship	1.00						
2. Meditation	.15	1.00					
3. Fasting	.50**	.31*	1.00				
4. Rest	.55**	.16	.64**	1.00			
5. Authentic leadership	.22	-.06	.04	.20	1.00		
6. Social desirability responses	.04	.16	.04	-.02	-.15	1.00	
7. Age	.01	.12	.05	.11	.20	.09	1.00

** $p < .01$. * $p < .05$.

Hypothesis Testing – Social Desirability and Confounders

Assessment of the potential influence of social desirability and confounder variables was performed by testing hypotheses H_1 and H_2 using the statistical methods of ANOVAs, correlation, and t tests appropriate to the type of variable and structure of the hypothesis.

Social Desirability – H_1^a through H_1^d

An ANOVA was used to examine differences in the mean values of each of the four leader-reported spiritual engagement constructs of worship, meditation, fasting, and rest between groups of leaders sorted by the number of extreme responses on the Socially Desirable Response Set Five-Item Survey (SDRS-5). No support was found for a significant difference in the mean values of those SDRS-5

response groups as shown in Table 4. Therefore, H_1^a through H_1^d were all accepted. Social desirability was not shown to significantly influence the leaders' responses on the various spiritual engagement dimensions, and the potential bias due to social desirability was not expected to influence other analysis.

Table 4: Worship, Meditation, Fasting, and Rest by Number of Socially Desirable Responses

ANOVA	SS	df	MS	F	p
Worship					
Between groups	131.42	4	32.86	1.79	0.14
Within groups	1102.98	60	18.38		
Total	1234.40	64			
Meditation					
Between groups	122.54	4	30.64	0.80	0.53
Within groups	2307.71	60	38.46		
Total	2430.25	64			
Fasting					
Between groups	242.27	4	60.57	1.12	0.36
Within groups	3259.27	60	54.32		
Total	3501.54	64			
Rest					
Between groups	27.69	4	6.92	0.31	0.87
Within groups	1357.45	60	22.62		
Total	1385.14	64			

H_2^a and H_2^b : Potential Confounders

To evaluate the potential confounding influence of age, the correlation values between age and authentic leadership depicted in Table 3 were examined, and the correlation relationship was not significant so H_2^a was supported and no further consideration for age was necessary in the analysis of the research hypothesis. Table 5 depicts the *t* test used to examine if there were significant

differences in authentic leadership between gender groups. The differences were not found to be significant ($p = .577$), so H_2^b was supported, and no consideration for the potential impact of gender was incorporated in the research hypothesis testing.

Table 5: Independent-Sample t Test of Authentic Leadership Means by Gender

Variable	Gender						95% CI		
	Female			Male			for M		
	M	SD	N	M	SD	n	diff.		
Authentic leadership	3.40	0.55	17	3.34	0.33	48	-.23, .36	0.44	20.24

* $p < .05$.

Hypothesis Testing – Research Hypotheses

Examining the relationship between the four dimensions of spiritual engagement and authentic leadership involved testing H_3 through H_6 using correlation analysis. Table 3 depicts the correlation between each of worship (W), meditation (M), fasting (F), and rest (R) with authentic leadership (AL). All correlations were not significant ($p < .05$); therefore, H_3 , H_4 , H_5 , and H_6 were not supported.

To test H_7 , a regression model was built with the independent variables of worship, meditation, fasting, and rest, and the dependent variable of authentic leadership. An examination of tolerance and variance inflation factor statistics did not indicate any collinearity concerns, and the normal probability plot suggested the residuals were reasonably normally distributed. The overall model and the independent variable coefficients were inspected for significance as support for the constructs' relationship to authentic leadership and the respective hypothesis. Table 6 shows the regression model results that indicate that the overall regression model was not significant and the coefficients for the four constructs of spiritual engagement were not significant predictors of authentic leadership. Therefore, H_7 was not supported.

Table 6: Multivariate Regression for Worship, Meditation, Fasting, and Rest Predicting Authentic Leadership

Variable	B	SE	β	<i>t</i>	Part. Corr.
(Constant)	3.25	0.15		22.14*	
Worship	0.02	0.01	0.21	1.34	0.17
Meditation	-0.01	0.01	-0.07	-0.54	-0.07
Fasting	-0.01	0.01	-0.17	-1.01	-0.13
Rest	0.02	0.02	0.21	1.20	0.15
R^2	0.08				
<i>F</i> for R^2	1.36				

** $p < .01$. * $p < .05$.

Post Hoc

To better understand the relationships and differences represented in the sample data, post hoc analyses were conducted to explore differences between for-profit (FP) and not-for-profit (NP) organizational leaders, and examine of the relationships between the four spiritual engagement constructs and the four first-order authentic leadership dimensions of relational transparency (RT), internal moral perspective (MP), balanced processing (BP), and self-awareness (SA) as conceptualized by Walumbwa et al. (2008) and measured by the Authentic Leadership Questionnaire (ALQ).

For-Profit and Not-for-Profit Comparisons

As depicted in Table 1, the sample was relatively homogeneous in terms of race and religion, but a good distribution of participants across not-for-profit and for-profit organizations allowed for investigation of the mean authentic leadership scores for the organizational type groups. The means differences testing found there were no significant differences ($p < .05$) observed between members of not-for-profit (NP) organizations and for-profit (FP) organizations in terms of the mean authentic leadership reported (NP $M = 3.32$, FP $M = 3.30$) as illustrated by the independent-sample *t* test in Table 7.

Table 7: Independent-Sample *t* Test of Authentic Leadership Means by Type of Organization, For-Profit or Not-for-Profit

Variable	Type of organization						95% CI for		<i>t</i>	<i>df</i>
	For-profit			Not-for-profit			<i>M</i>			
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	diff.			
Authentic leadership	3.30	0.37	24	3.32	0.42	33	-.24, .19		-0.23	55

* $p < .05$.

The mean spiritual engagement values of leaders in each organizational type group were also compared. Using a series of independent-sample *t* tests, differences in leader-reported spiritual engagement measures between organizational types revealed that significant differences ($p < .05$) were measured in worship and fasting with not-for-profit leaders reporting lower scores, which represented higher spiritual engagement. A meaningful difference was also observed in average reported rest, although the difference was not significant at $p < .05$.

Table 8: Independent-Sample *t* Test of Spiritual Engagement Means by Type of Organization, For-Profit or Not-for-Profit

Spiritual engagement dimension	Type of organization						95% CI for		<i>t</i>	<i>df</i>
	For-profit			Not-for-profit			<i>M</i>			
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	diff.			
Worship	9.13	5.57	24	6.52	2.68	33	.10, 5.12		2.13*	30.79
Meditation	13.29	5.12	24	12.00	6.83	33	-2.03, 4.61		0.78	55.00
Fasting	17.96	7.64	24	14.00	6.67	33	.15, 7.77		2.08*	55.00
Rest	10.33	4.58	24	8.36	3.13	33	-.07, 4.01		1.93	55.00

* $p < .05$.

Spiritual Engagement Relationships to Individual Authentic Leadership

Dimensions

Authentic leadership as captured by the ALQ was developed with the four dimensions of RT, MP, BP, and SA (Walumbwa et al., 2008). While research has

not consistently supported adequate discriminant validity of the four first-order constructs (Roof, 2014), the relationships between each dimension of spiritual engagement and the different authentic leadership dimensions were examined to seek additional, more refined insight into the spiritual engagement–authentic leadership relationships. Composite variables were created for each authentic leadership dimension from the original survey data and Cronbach’s alpha values supported good to very good reliability for RT (.70), MP (.82), and SA (.84) with balanced processing interitem correlation of only .59, suggesting any analysis of balanced processing should be approached with caution (Pallant, 2010). A correlation analysis was performed to examine the relationships between the individual dimensions of spiritual engagement and the first-order constructs of authentic leadership. Worship was the only spiritual engagement construct found to exhibit significant correlation with any of the authentic leadership dimensions. Positive, significant correlations were observed between worship and the relational transparency and balanced processing constructs at $p < .05$ as depicted in Table 9.

Table 9: Interveriable Correlations With First-Order Authentic Leadership Constructs

Variable	1	2	3	4	5	6	7	8
1. Worship	1.00							
2. Meditation	.15	1.00						
3. Fasting	.50**	.31*	1.00					
4. Rest	.55**	.16	.64**	1.00				
5. Relational transparency	.25*	.02	.07	.23	1.00			
6. Internal moral perspective	.15	-.06	.11	.20	.74**	1.00		
7. Balanced processing	.28*	-.14	.08	.24	.69**	.54**	1.00	
8. Self-awareness	.14	-.06	-.08	.07	.71**	.69**	.77**	1.00

** $p < .01$. * $p < .05$.

Results Summary

The analyses performed and described in this chapter revealed support for the six initial hypotheses (H_1^a through H_1^d and H_2^a and H_2^b), which posited that social desirability and confounders would not have significant effects on planned analyses. Support of the social desirability and confounder hypotheses indicated that the influence of the variables were not significant and no further statistical consideration during research hypotheses testing would be required. Analysis of the relationships between the four spiritual engagement constructs and authentic leadership found no significant relationships ($p < .05$) and a lack of support for research hypotheses H_3 through H_6 and H_7 . Post hoc analysis was performed for additional insight, and results revealed that there were no significant differences in authentic leadership measures between for-profit and not-for-profit leaders, but not-for-profit leaders' mean worship and fasting scores were significantly lower than for-profit leaders indicating greater worship and fasting engagement for not-for-profit leaders. Post hoc exploration of the correlation between the spiritual engagement constructs and the four first-order dimensions of authentic leadership found significant relationship ($p < .05$) between worship and the relational transparency ($r = .25$) and balanced processing constructs ($r = .28$). In Chapter 5, I interpret and discuss more fully what this research has revealed.

Chapter 5 – Discussion

This study explored the relationship between the constructs of spiritual engagement, which encompasses the beliefs, attitudes, and actions related to spiritual practices or disciplines, and authentic leadership attributes to determine the nature and strength of such a theorized relationship. The intent was to advance the literature on potential antecedents to authentic leadership, which Walumbwa et al. (2008) argued is developable but not widely explored, by identifying what potential antecedents may be (Caza et al., 2010; Gardner et al., 2011). In addition, many scholars have argued that leaders' spirituality is a fundamental unexamined element of their leadership identity (Burke, 2006; Conger, 1994; Craigie, 1999; Fry, 2003; Issler, 2009; Posner, 2009; Reave, 2005; Strack & Fottler, 2002). Roof et al. (2015) proposed that spiritual engagement, as "a complex spiritual transformative process" (p. 3), could develop an individual's closeness with God and, through both cognitive and affective transformation, shape individual identity. Therefore, this research focused specifically on the spiritual engagement and authentic leadership relationship, responding to the calls for investigating the spirituality–leadership connection and authentic leadership antecedents (Giacalone & Jurkiewicz, 2003; Reave, 2005; Walumbwa et al., 2008). Empirically, this investigation tested hypothesized relationships between the four spiritual engagement constructs and authentic leadership as developed from the literature, and while the specific core research hypotheses were not supported by the sample data, post hoc analysis revealed some insights to guide future investigations and assist theorists and practitioners in better understanding the complex inner dimensions of leadership. I also examined the potential influence of social desirability and potential demographic confounders by testing related hypotheses as precursors to exploring the research question.

Within this chapter, I describe specific findings of the research, examine implications for the academy, and present the strengths and limitations of this cross-sectional, survey-based, quantitative study. I then use the insight garnered from this study to offer some direction and specific suggestions for future research that could further explore the dynamics between human spirituality with its

transformational and identity-shaping potential and the complex social process of leading.

Research Findings

Responding to calls from the research community, the research was designed to examine the relationship between spiritual engagement and leadership, advance knowledge on authentic leadership antecedents, and investigate other demographic or research variable dynamics that could advance theory or inform further research. The findings fulfilled the design by revealing insight into the preliminary questions of potential social desirability and demographic confounding, testing the relationships between spiritual engagement and authentic leadership, and further illuminating spirituality and leadership phenomena.

The preliminary hypotheses focused on determining that influencers of social desirability and confounder demographic variables were not significant when analyzing spiritual engagement and authentic leadership relationships. The data supported the H₁, which suggested that social desirability as measured by the Socially Desirable Response Set Five-Item Survey (SDRS-5), which embeds typical socially and morally desirable items within the survey, did not significantly influence leader spiritual engagement reporting as captured by any of the four spiritual engagement constructs of worship, meditation, fasting, or rest. Similarly, testing gender and age as potential confounders supported H₂, which suggested that neither were significantly related to authentic leadership. With the findings that social desirability, gender, and age were not significant influencers in the spiritual engagement–authentic leadership relationship, they were not included when analyzing the research hypotheses.

Using multiple regression to test the four spiritual engagement constructs as predictors of second-order composite authentic leadership, the analysis did not support H₃ through H₇, indicating that the spiritual engagement practices, beliefs, and attitudes measured by the Spiritual Engagement Instrument (SpEI) were not significantly correlated to authentic leadership nor predictors of multidimensional authentic leadership as conceptualized by Walumbwa et al. (2008) and measured by

the Authentic Leadership Questionnaire (ALQ). I then pursued post hoc examination to derive additional research findings related to population group differences and the relationship of authentic leadership and spiritual engagement using one-way analyses of variance (ANOVA) and *t* tests, and correlation between spiritual engagement constructs and the first-order dimensions of authentic leadership as conceptualized and developed by Walumbwa et al. (2008). The post hoc exploration revealed differences in the reported level of some spiritual engagement constructs between for-profit and not-for-profit with not-for-profit leaders having greater worship and fasting engagement but not meditation or rest measures, indicating some differences in spiritual engagement between leaders in the two organizational types. The *t* test between not-for-profit and for-profit leader groups did not find significant differences in the follower-reported authentic leadership characteristics, suggesting there were comparable authentic leadership characteristics between the types of organizations. Further detailed examination of the relationships between the individual dimensions of spiritual engagement and the four first-order authentic leadership constructs using correlation indicated that worship, which was the greatest average spiritual engagement measure in the sample (lowest score), was significantly related with the authentic leadership dimensions of relational transparency and balanced processing but not internal moral perspective or self-awareness. The implications of correlation with only some authentic leadership dimensions may provide the study's greatest contribution to theory by indicating complexities in the authentic leadership–spiritual engagement relationship or in measurement of the constructs of interest.

Implications

This research is original in exploring the relationship between the complex attitudes, beliefs, and behaviors of spiritual disciplines and authentic leadership. The findings have revealed new insights for leadership and spirituality theorists on the nature of the spirituality–leadership association, the complex dimensions of authentic leadership as indicators of leader identity, and the seemingly uneven relationship of specific spiritual engagement constructs to leadership. The study

answered the call by both spirituality and authentic leadership researchers to examine potential antecedents and relationships (Giacalone & Jurkiewicz, 2003; Reave, 2005; Walumbwa et al., 2008). For the academy, while the work did not support the research hypotheses, a number of related early-stage discoveries were uncovered through post hoc analyses that offer direction for future research into leader identity formation. Pending additional investigation, the discovery of relationships between specific spiritual engagement and leadership constructs also suggest potentially actionable leadership antecedents for practitioners seeking effective leadership development approaches through the identity-shaping potential of spiritual engagement.

In addition to revealing spiritual engagement and leadership findings, the study also contributed to the literature for those interested in understanding the potential influence, or more precisely, lack of influence that social desirability bias, gender, and age may have in related leadership spirituality surveys. Finally, the use of the newly developed SpEI provided further support for scales of the SpEI as reliable and valid measures of the complex behavior and attitudinal constructs involved in spiritual transformation.

The primary focus of this research was toward advancing the understanding of spiritual engagement as it relates to authentic leadership and while the relationship was not supported as hypothesized, the study provided some evidence of such a spiritual engagement and leadership relationship. Authentic leadership has been the subject of great interest, but beyond a consistency between values and behaviors, differences in the authentic leadership concept between theorists remains (Yukl, 2010). Yukl (2010) suggested that moral behavior is often driven more by social consensus than underlying moral identity, so the influence of spiritually influenced self-identity may be reflected in and more readily observed in leader behaviors with more ambiguous social expectations. For this study, less defined contemporary social expectations in the relational transparency and balanced processing dimensions of authentic leadership as compared to moral and self-awareness constructs would be reflected in stronger relationships between identity-influencing spiritual engagement and relational transparency and balanced

processing, which is what post hoc analysis indicated. That is, if leader behaviors captured within the internal moral perspectives and self-awareness dimensions of the ALQ are more socially expected by contemporary followers while the relational transparency and balanced processing are less consistently and clearly expected, relational transparency and balanced processing would correlate more with the leader-identity-shaping and internal transformation influences of spiritual engagement. Such uneven spiritual and authentic leader relationships driven by the difference between social and identity behavior influences would explain the relationships observed in this study.

The relationship between spiritual identity and the relational transparency and balanced processing dimensions of authentic leadership as found in this work is also consistent with the qualitative work of Vasconcelos (2010) who observed spirituality deepened collegial relationships and resulted in more effective decision making, which is an attribute captured within the balanced processing construct. Crossman (2010) similarly theorized that many leaders perceive their identities as connected to their spirituality and that more spiritual leaders would display greater transparency and relational abilities, characteristics described within authentic leadership as balanced processing and relational transparency (Walumbwa et al., 2008).

While this study focused exclusively on authentic leadership theory, the departure from social norms that is reflected in leader behaviors and driven by identity may be reflected better in other normative leadership theories. Theories such as servant leadership, transformational leadership, or different authentic leadership theories that more involve humility and power-shifting behaviors more at conflict with natural ambition and achievement motives may better reflect behaviors of interest. Such theories may actually encompass observable characteristics more reflective of true identity shifting than the Walumbwa et al (2008) authentic leadership constructs used for this research. For example, Greenleaf (2010) suggested that the servant leader in particular acts contrary to expected norms and organizational interests. Therefore, while the Walumbwa et al (2008) concept and the related ALQ instrument are widely used in research (Roof,

2014), the findings of this study may suggest that other authentic leadership concepts and alternative follower-focused theories may better expose the identity influences of spiritual transformation.

Relationships of spiritual engagement and contemporary normative leadership offer fertile research opportunities for studies to explore uneven observable influences of leader identity. The lack of support within this study for the relationship between the four spiritual engagement constructs and authentic leadership viewed in light of the post hoc correlation between some spiritual engagement dimensions and relational transparency and balanced processing may actually have provided greater insight into how identity affects observable leader behaviors. Collectively, the research has contributed to the literature in understanding spiritual engagement, authentic leadership, leader identity, and normative leadership through insight into the complex social conformity, identity, spirituality relationships while offering abundant opportunities for future qualitative, quantitative, and mixed-methods research.

In addition to revealing leadership and spirituality insights, the research contributed to instrument validity and reliability. The SpEI was used to measure the four dimensions of spiritual engagement, and the data confirmed excellent inter-item reliability offering modest additional support for the validity and reliability of the SpEI scales. The SpEI is the first instrument measuring the complex behavior and belief constructs of spiritual engagement and has yet to be widely employed since it was only recently developed. This study renders some meaningful and needed experiential data to support further use of the SpEI. The ALQ has been widely used, and the reliability testing in this study further confirmed reliability of the instrument at the second-order consolidated authentic leadership construct while the inadequate inter-item correlation of the balanced processing construct contributed to the open questions that surround the first-order ALQ construct usability.

The study also contributed to understanding differences in spiritual engagement and authentic leadership between leaders within for-profit and not-for-profit organizations. The difference testing that was performed revealed higher self-

reported worship and fasting spiritual engagement for not-for-profit leaders. However, leaders in not-for-profit organizations were not found to differ significantly in authentic leadership from for-profit leaders, despite those greater not-for-profit leaders' worship and fasting practices. While the unequal values may suggest that spiritual engagement does not affect leader identity or that the overall authentic leadership measures do not capture leader behaviors reflective of identity transformations, there may be other underlying variables that were not observed within the population or study design. For example, for-profit leaders may have authentic leadership behaviors advanced through greater training, education, or other development efforts aside from spiritual engagement. Those other influencers would mask any variation in authentic leadership that may be due to the increased spiritual engagement levels between organizational types. This further supports the need to understand better what observable leader behaviors are affected by spirituality and identity transformation and which behaviors may be affected by development, education, or experience. Deeper understanding of not-for-profit leader leadership compared to for-profit leadership would aid in understanding the complex dynamics of leadership across organizational types as found in this research.

While researchers often theorize age, gender, and social desirability as unwanted influences in social science research and leadership research specifically, the data in this study do not support any such effects within the measures of leadership and spirituality. The negative findings contribute to the literature, suggesting the effects of the age, gender, and social desirability variables may be less impactful than theorized.

Strengths and Limitations

The key strength of this research was the contribution to organizational leadership theory of a deeper understanding of the leadership–spirituality relationship using constructs captured using the most widely employed authentic leadership measure (Roof, 2014) and a spirituality instrument that measures not just behaviors but the underlying attitudes and beliefs necessary for impacting identity

(Roof et al., 2015). The ensuing analysis also revealed dimensions of the spiritual engagement relationships with first-order authentic leadership dimensions that introduce social influences on desirable leadership behavior as potential factors confounding leader development, measurement, and transformation using concepts such as spiritual engagement. As a result, the study added to the literature modest insights into spiritual practices and specific authentic leadership characteristics and, in the process, raised the suggestion that examining effects of identity transformation in leaders may require other normative leadership instruments that better measure observable, internal value-driven characteristics that are reflective of self-identity more than social consensus.

Among the weaknesses of this research, the spiritual engagement instrument was recently developed, and this was the first use of the instrument since development, so widespread validation has not occurred. Therefore, the validation support for the SpEI is modest, and nomological validity has not been well developed. While a review of the theoretical development of the SpEI suggested the instrument aligned with the theory to be tested by this study, the limited use of the SpEI prevented widespread validation and support for how well the instrument captures those behaviors, beliefs, and attitudes most reflective of personal transformation and identity shaping for leaders' development. Authentic leadership and the ALQ while widely used in research, captures only a select set of effective leadership characteristics, so additional leadership measures would provide broader insight into the specific leadership effects of spiritual engagement.

The study population of 65 leaders satisfied the size constraints for the statistical analysis planned and performed, but the voluntary nature of the participants, drawn from the researcher's circle of influence and representing a primarily White, Christian sample, limited generalizability and resulted in limited variance in the spiritual engagement dimensions. An increased sample size could also provide greater statistical power for identifying significance with smaller effect size relationships.

An additional limitation may have resulted from the use of the SDRS-5 for evaluating whether social desirability affected leaders' survey responses and

introduced desirability bias. While the SDRS-5 has been widely used in research, extreme response items may not adequately measure the difficult concept of social desirability response bias in spirituality measurements, especially within a religious community where social pressures to engage in spiritual practices are elevated. That is, the SDRS-5 items may measure a more general social desirability bias rather than one present when measuring spiritual activities. Such a potential limitation of the SDRS-5 to capture bias in spirituality, if it exists, would be especially limiting in this research due to the homogeneous characteristic of the mostly Christian participants.

Future Research Directions

Interesting relationships between spiritual engagement and authentic leadership along with identification of differences in for-profit and not-for-profit populations revealed in this research provided guidance for future spirituality and leadership research. To further the understanding of complex spirituality and spiritual engagement dynamics related to leadership and explore the transformative nature of spiritual engagement, which is an early stage concept, phenomenological qualitative research is recommended. Seeking experiences and perspectives from leaders who consider themselves transformed and transforming their leadership identities through spiritual engagement could expose underlying dynamic, leader development strategies and new theoretical insights. Such learning could offer insight into what may cause uneven relationships between spiritual engagement and certain leader characteristics and generally inform researchers and practitioners in their pursuit of leader identity and spirituality theory development.

The post hoc findings, which revealed the relationship of worship to the two externally observable authentic leader behaviors of balanced processing and relational transparency and the lack of a relationship to internal moral perspective and self-awareness, supported the overall spirituality–leader connection while suggesting that there may leadership constructs besides the four authentic leadership dimensions that better measure the identity influence of spiritual engagement. Servant leadership, which reflects a leadership guided by values even

in the face of external pressures (Yukl, 2010), may be more affected by spiritual engagement identity shaping than ethical or authentic leadership measures, which may be more prone to social consensus-driven behaviors. Future quantitative research, informed by the results of this research, resulting from a review of alternative normative leadership theory literature, and integrating insights from any qualitative work performed, is suggested using servant leadership or other theories that may be expected to be influenced by spiritual self-development. Future quantitative research should also seek greater race and religious diversity to improve generalizability and increase variable dispersion.

Based on the significant differences in the most common spiritual engagement constructs of worship and fasting between not-for-profit and for-profit populations, as well as an identifiable but not significant ($p < .05$) difference in rest, research is encouraged into differences between leaders in not-for-profit and for-profit organizations related to spiritual engagement and normative leadership. Such research should be of adequate size and diversity to provide generalizable insight into whether the type of organization is likely to be a moderator in the relationship between spirituality and leadership and how differences may affect research and organizational practices in different organizational types.

The cross-sectional nature of the present study and the suggested quantitative studies involving other leadership outcomes will provide useful relationship insights, but to understand causality and further assist practitioners seeking more effective leadership development approaches, it is important to test causation of spiritual engagement. Semi-experimental or longitudinal-designed research with well-designed control protocols and a broadly generalizable population are needed to better answer the question of whether identity and leadership effectiveness can be developed by spiritual engagement.

Finally, sound instrumentation is critical for future research, so further validation of the SpEI should be conducted with special attention to the discriminant and convergent validity using more advanced statistical methods such as structural equation modeling. A valid measure of spiritual engagement such as the SpEI can support research into critical leadership, organization, and social

phenomena related to spiritual development so further psychometric investigation would be helpful.

Conclusion

The insight into the leadership–spiritual engagement relationship resulting from this research holds the promise of advancing the understanding of core leadership motivators and identity shapers while encouraging future research into internal leadership dynamics, organizational spirituality effects, and normative leadership antecedents. For practitioners seeking more effective development methods, understanding leader spirituality and practices may reveal new, innovative approaches that create more effective, trusted leaders by affecting identity rather than teaching behaviors. The research derived meaningful insights through evaluating socially desirable biases, potentially confounding demographic variables, and spiritual engagement relationships to authentic leadership. While the core research hypothesized relationships between the four spiritual engagement dimensions and second-order spiritual engagement were not supported, examination of relationships between the spiritual engagement constructs and the first-order authentic leadership dimensions and testing of differences between leaders of not-for-profit and for-profit organizations revealed insights for advancing the literature and raising important questions for future research. This study established a foundation for advancing theories related to leader spiritual engagement and identity through the findings, implications, limitations, and the suggested future research presented in this dissertation.

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Appendix A

Spiritual Engagement Instrument (SpEI)

This survey is intended to capture within your own faith tradition, worldview, or philosophy, those spiritual practice and association beliefs and attitudes that draw you closer to God or the divine. While you may feel strongly theologically or have specific ideas of how the spiritual practices or disciplines should be conducted, the survey was designed to measure across a wide range of such perspectives, so please do your best not to be distracted by the nature of any specific question.

Rate the following statements using the categories of Strongly Agree, Moderately Agree, Mildly Agree, Mildly Disagree, Moderately Disagree, and Strongly Disagree as indicated on the survey form.

Worship

- Prayer helps me feel closer to God.
- I make requests of God in my prayers.
- Worship is refreshing to me spiritually.
- Worship is a regular practice for me.
- Worship is a priority in my spiritual life.

Meditation

- Meditation helps me experience peace.
- My attitude is often helped by meditation.
- Meditation is an important part of my spiritual life.
- Meditation helps me be more genuine or authentic.
- I get along better with others when I meditate.

Fasting

- When I fast I experience more clarity.
- My spirit is cleansed by my fasting.
- What is truly important becomes clear when I fast.
- My values or morals are strengthened by fasting.
- I feel closer to my God when I fast.

Rest

- My time off for religious/spiritual rest is important to me.
- I am more patient and focused when I have my time off for religious/spiritual rest each week.
- My spirit is refreshed by my dedicated weekly rest.
- My weekly time for religious/spiritual rest leaves me in a better place.
- Life's priorities are clearer as a result of my dedicated time off weekly for my faith practices.

Appendix B

Excerpts of Authentic Leadership Questionnaire (ALQ)

Instructions: The following survey items refer to your leader's style, as you perceive it. **Judge how frequently each statement fits his or her leadership style using the following scale:**

- 0 = Not at all
- 1 = Once in a while
- 2 = Sometimes
- 3 = Fairly often
- 4 = Frequently, if not always

My Leader:

Three sample items as allowed by copyright restriction and research permission

- 2. admits mistakes when they are made
- 7. makes decisions based on his or her core values
- 14. accurately describes how others view his or her capabilities

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Appendix C

Socially Desirable Response Set (SDRS-5)

Strongly Agree
Moderately Agree
Mildly Agree
Mildly Disagree
Moderately Disagree
Strongly Disagree

1. I am always courteous even to people who are disagreeable.
2. There have been occasions when I took advantage of someone.
3. I sometimes try to get even rather than forgive and forget.
4. I sometimes feel resentful when I don't get my way.
5. No matter who I'm talking to, I'm always a good listener.

Hays, R. D., Hayashi, T., & Stewart, A. L. (1989). A five-item measure of socially desirable response set. *Educational and Psychological Measurement, 49*, 629-636.

Appendix D

Human Subject Research Review Form

REGENT UNIVERSITY

HUMAN SUBJECTS REVIEW BOARD APPLICATION

Please submit *one electronic* copy of this form and any supporting documents to your dissertation chair or to the SBL IRB representative, Dr. Emily Cabanda at ecabanda@regent.edu.

1. PROJECT REVIEW

- New Project (The HSRB will assign an ID#) _____
 Revised Project (Enter ID#) _____
 Renewal (Enter ID#) _____

2. PRINCIPAL INVESTIGATOR

Rick Roof _____
 Address ___46 Abbey Court, Fishersville, VA 22939___
 Phone 561-445-7177

E-Mail Richroo@mail.regent.edu

Date 07/15/2015

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

Dissertation Committee: Dr. Bruce Winston, Dr. Mihai Bocarnea, Dr. Alan Marshall

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

This research is for Dissertation Thesis Independent Study
 Other

Faculty Advisor's Name: Dr. Bruce Winston

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

I have completed human subjects research training. Training Date: April 9, 2013

4. **PROJECT TITLE** The Relationship between Spiritual Engagement and Authentic Leadership: Exploring the Core of Leadership

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

If yes, please identify the funding source:

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

Date August 1, 2015

Ending Date January 16, 2016

7. **DESCRIPTION OF PARTICIPANTS:** Number 200-500 Age Range 18+

Briefly describe subject population: Randomly selected leaders and associated followers from U.S. based organizations of varying characteristics representing a representatively diverse population.

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

Further information about each review category can be found at http://www.regent.edu/academics/academic_affairs/IRB/guidelines.cfm

- 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

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.

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.")

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

- 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

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.*

The purpose of this research is to contribute to the understanding of the relationship between spirituality and leadership by exploring spiritual engagement, a construct and measure recently developed by Roof, Bocarnea, and Winston (2015) to capture the transformational nature of spiritual practices and the underlying and

transformed beliefs and attitudes, as an antecedent to authentic leadership. The research question examined through this study will be whether leaders' level of spiritual engagement as measure by the four factors of the Spiritual Engagement Instrument (SpEI) can predict authentic leadership as reported by the leaders' followers. Data will be collected from leaders and their associated followers within a variety of organizations using online survey tools (Fluidsurveys) with approximately 20 SpEI survey items for leaders plus 5 items to assess social desirability, and 16 ALQ items for followers plus basic demographics for all participants. Due to copyright restrictions on the Authentic Leadership Questionnaire (ALQ) and the need to related specific followers and leaders, individualized email addresses will be used to distribute specific links to each follower and leader for use in initial data record association. Once the data is gathered, leader-follower relationships are established, and data integrated, all individualized information will be removed from the data file. Survey completion is expected to take approximately 10-15 minutes and all questions are typical assessments of psychological and attitudinal perspectives. Briefings will be offered of only consolidated findings to organizations that provide permission and support for the data collection. Should potential participant rosters and anticipated response rates indicate potential difficulties in securing adequate data, a drawing for 3, \$50 Amazon gift cards will be offered to participants. The modest amount and probability of award of the incentive minimizes concerns of coercion.

HSRB Project Description Checklist

a) Is your data completely anonymous, where there are no possible identifications of the participants.	No X	Yes <input type="checkbox"/>
b) Will you be using existing data or records? If yes, describe in project description (#9 above)	No X	Yes <input type="checkbox"/>
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.	No <input type="checkbox"/>	Yes X
d) Will you be using videotape, audiotape, film? If yes, describe in #9	No X	Yes <input type="checkbox"/>
e) Do you plan to use any of the following populations? Regent	No	Yes

students, Regent employees, Non-English speaking, cognitively impaired, patients/clients, prisoners, pregnant women? If yes, describe which ones in #9	X	<input type="checkbox"/>
f) Do you plan to use minors (under 18)? If yes, describe in #9 and give age ranges	No X	Yes <input type="checkbox"/>
g) Are sites outside of Regent engaged in the research? If yes, describe in #9 and give consent letter or their IRB information	No X	Yes <input type="checkbox"/>
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 X	Yes <input type="checkbox"/>
i) Are you using machines, software, internet devices? If so describe in #9	No <input type="checkbox"/>	Yes X
j) Are you collecting any biological specimens? If yes, describe in #9	No X	Yes <input type="checkbox"/>
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 <input type="checkbox"/>	Yes X
l) Will there be data sharing with any entity outside your research team? If so, describe who in #9	No X	Yes <input type="checkbox"/>
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 X	Yes <input type="checkbox"/>
n) As applicable, do you plan to provide a debriefing to your participants? If written, include in application as addendum	No X	Yes <input type="checkbox"/>
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 <input type="checkbox"/>	Yes X
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 X	Yes <input type="checkbox"/>
q) Will subjects be studied on Regent University campus? If yes,	No	Yes

please describe where the study will be done in #9	X	<input type="checkbox"/>
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 X	Yes <input type="checkbox"/>
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 X	Yes <input type="checkbox"/>

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.

Participants will be recruited from organizations that have provided permission to survey and leader-follower rosters, as well as individual leaders and their followers through researchers' social media and personal contacts. Participants will be over age 18, with ethnic distributions reflecting the U.S. population, genders expected to be equally represented, no participants from institutions (no prisoners or patients), and healthy both physically and mentally. The survey link will be distributed via email to each specific participant. No special populations will be solicited.

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.

The initial page of the online survey will include a consent to participate statement and a selection checkbox indicating agreement to the conditions. The text is attached to this application.

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

12. WRITTEN CONSENT

- I am requesting permission to **waive written consent**, based on one or more of the following categories (check all that apply):
- 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.
 - 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. Form will be integrated on first page of electronic survey and require agreement to proceed.

13. CONFIDENTIALITY OF DATA

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

Records will be maintained only on a single computer and once the leader-follower data is integrated, the files with identifying data will be archived on the single PC, password protected, and the individual participants' identifying data will be scrubbed from data file to be used for further analysis

**** 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)?

17. ATTACHMENTS:

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

- A copy of your training certificate (required for principal investigator)
- 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.html>) 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.

Rick Roof _____ _ 07/15/2015 _____
Signature of Principal Investigator Date

Signature of Co-Investigator (if applicable) Date

email=bwinston@regent.edu, cn=Bruce E. Winston, Ph.D., o=Regent University, ou=
email=bwinston@regent.edu, cn=Bruce E. Winston, Ph.D., o=Regent University, ou= approving this document 2015.07.16 09:45:50 -04'00' 07/16/2015 _____
Signature of Faculty Advisor (if applicable) Date



- Approve
- Recommend Revisions
- Reject



HSRB Member

07/16/2015

Date

HSRB Member (if applicable)

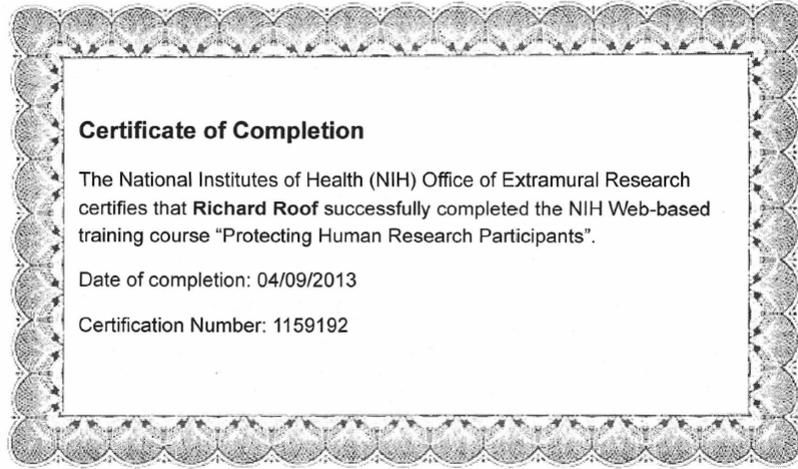
Date

HSRB Member (if applicable)

Date

Protecting Human Subject Research Participants

<http://phrp.nihtraining.com/users/cert.php?c=1158192>



Informed Consent and Study Disclosure – Delivered on page one of online survey instrument

This study is being conducted to examine leader self-care and authentic leadership. The research is being performed by Rick Roof, an Organizational Leadership Ph.D. candidate at Regent University. You are invited to participate in this study which will involve completing an online survey instrument which is expected to take approximately 5-10 minutes to complete including a few demographic questions which will be used only for analysis and validation.

As a participant no compensation and no direct benefits are offered [comment on Amazon drawing will be added if such incentive is offered], although you may find that contributing to the research to better understanding emerging concepts is rewarding.

Participation is voluntary, anonymous, and withdrawal is available at any time. Risks are minimal, primarily related to anonymity although no name, social security, or other personally identifying information will be collected except for your email address. Email addresses will be used to connect leader and follower responses after which the email data will be removed from the file and all materials used for analysis. The survey responses will be stored on secure servers. The results of this study may be published and describe consolidated responses, but individual responses or participants will not be depicted in any articles.

To be eligible to participate, you must be an adult (18 or over). If you have any questions concerning participation, privacy, or the study, please contact the researcher, Rick Roof, at richroo@mail.regent.edu.

If you elect to continue to the survey, understanding the aforementioned conditions, your participation will be truly appreciated.