PERCEPTIONS OF WISDOM BY ORGANIZATIONAL LEADERS

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PERCEPTIONS OF WISDOM BY ORGANIZATIONAL LEADERS

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ABSTRACT

Wisdom has been considered the fulfillment of human purpose (Trowbridge & Ferrari, 2011), solely the province of God (Assmann, 1994), and a quaint naïve concept (Case & Gosling, 2007). These disparate views demonstrate the need for further study of wisdom as a universally accepted definition does not yet exist (Ardelt, 2003; Jeste et al., 2010). Scholars do agree that wisdom is both needed by leaders and in short supply (Kessler & Bailey, 2007b; Küpers & Pauleen, 2015). Expanding on the research of Livingston (2012) and Peterson (2016), this study used the Wisdom-Based Leadership Model (WBLM; Ludden, 2009, 2015) as a basis for a survey instrument that sought further understanding into organizational leaders' perceptions of wisdom.

Three hundred and seventy-five leaders from a single global organization expressed their perceptions on the 10 fundamental constructs that comprise the WBLM: knowledge, experience, community, critical thinking, reflection, deliberation, integrity, courage, collaboration, and spirituality (Ludden, 2009). These leaders showed significant agreement that the WBLM accurately captured the essence of wisdom and that wisdom development is important for organizational leaders.

DEDICATION

To my wife, Jeryl, your patience throughout this process has been astounding. I can never thank you enough for making this work possible. I could not ask for a better partner in life, and I am so blessed that we are together. You sacrificed a lot for this degree, and I am reminded daily how amazing you are.

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CHAPTER ONE—INTRODUCTION

The General Nature of the Problem

Many scholars argue that wisdom is one of the most important qualities for a leader (Jones, 2005; Küpers, 2007; McKenna, Rooney, & Liesch, 2006; Yang, 2011). Kessler and Bailey (2007a) stated that nothing is more important than wisdom for conducting human affairs. Callahan (2009) listed wisdom as one of the most important virtues a leader can possess. Sternberg (2003) stated that wisdom is the most important quality a leader can have, but he also said it is the rarest of qualities. Unfortunately, this rarity is exemplified in recent examples of the foolish leadership of large companies. Volkswagen, Olympus Corporation, GlaxoSmithKline, and Samsung have all been in the news in recent weeks for unethical and foolish leadership decisions. It appears that the pursuit of wealth continues to influence many leaders into unwise and unethical actions.

In March 2016, Olympus Corp reached a $646 million settlement with the U. S. Department of Justice (2016). This settlement was the largest fine to date ever leveled against a medical device company. The reason it was so large is that Olympus had made a routine of paying substantial bribes and kickbacks to physicians and hospitals. These practices continued for years and were the direct result of unwise leadership, not a single rogue event.

While the Olympus Corp's $646 million settlement seems substantial, it pales in comparison to the $3 billion resolution that GlaxoSmithKline (GSK) agreed to pay in 2012 (U. S. Department of Justice, 2012). GSK pled guilty to three counts of criminal

information, including two counts of introducing misbranded drugs and one count of failing to report safety data to the Federal Drug Administration. GSK risked patient safety in an attempt to gain a bigger market share. Again, this event was not a result of one or a few salespeople stepping outside the bounds. GSK is a record-setting example of unwise leadership. In fact, part of the agreement GSK made with the Department of Health and Human Services, Office of the Inspector General (HHS–OIG) was a five-year Corporate Integrity Agreement (CIA). This CIA allowed the HHS–OIG to monitor the activities of GSK directly, specifically focusing on the individual accountability of the board and executives. A company as large and powerful as GSK requiring a government agency to monitor the actions of its executives and board individually provides a compelling illustration of leaders whose focus is not wise action.

The foolish and greedy actions of Olympus Corp and GSK are easy to identify, especially in hindsight. It is more difficult to distinguish what constitutes wisdom in leaders and how it can be developed. This research built on the research of Livingston (2012) and Peterson (2016), and used the Wisdom-Based Leadership Model (WBLM) (Ludden, 2009, 2015) to gain further understanding into organizational leaders' perceptions of wisdom. Specifically, leaders shared their perspectives on what characteristics contribute to wisdom and the importance of developing those characteristics.

The Problem Statement

Historically, leadership is associated with wisdom (Baltes & Smith, 1990; Yang, 2011). Jones (2005) noted that wisdom allows leaders to approach dynamic organizational environments with cautious confidence. McKenna, Rooney, and Boal

(2009) argued that leadership requires wisdom to provide excellence in judgment, insight, and character. Sternberg (2003) identified wisdom as one of the three key components of leadership. A significant amount of literature shows the connection between wisdom and leadership (Finkelstein, 2003; Gygax & Fitzgerald, 2011; Küpers & Statler, 2008; Raelin, 2002).

In particular, the need for wisdom in business leaders is strongly illustrated, both by the literature (Dunham, 2010; Intezari & Pauleen, 2014; Khan & Altaf, 2015; Küpers & Pauleen, 2016; Provis, 2010), and by recent examples of unwise business decisions. Many of those unwise decisions can be attributed to the separation of ethics and business. Dunham (2010) rejected that separation, stating that viewing entrepreneurial decisions through the lens of practical wisdom reorients the leader away from a single financial dimension and allows the consideration of the entire complex process. This opinion was supported by Intezari and Pauleen (2014) who contrasted a wise response versus a knowledge response. A knowledge response is constructed solely of knowledge, whereas a wise response is knowledge combined with moral, epistemic, and practical virtues. The wise response is especially critical in complex environments (Intezari & Pauleen, 2014). Khan and Altaf (2015) explained that the need for wisdom goes beyond immediate decision making. They described the process of organizational knowledge creation, and explained that it required leadership that practices practical wisdom. Küpers and Pauleen (2015) proposed that by connecting learning with habits and improvisation, one can create a basis for the development of wisdom.

While wisdom is strongly supported in the literature as a positive attribute for a leader, it is still not entirely clear what contributes to wisdom or if leaders are actively

seeking to increase their wisdom. This study examined those questions using the WBLM (Ludden, 2015) to gather organizational leader perceptions of both the components of wisdom and the importance of wisdom development.

The WBLM was chosen as the model for this study because it describes wisdom as a dynamic process a leader uses to apply knowledge, experience, and virtue in seeking truth that subsequently governs the leader's actions and decisions (Ludden, 2009). Ludden (2015) explained that the WBLM can be operationalized for leader development because it brings together acquired knowledge systems, assessment of decisions processes, and leadership responsibilities. Livingston (2012) validated this model in his study of executive coaches and their perceptions of wisdom use in coaching. Likewise, the model was used to examine how college presidents of the Council of Christian Colleges and Universities (CCCU) perceived wisdom and the way it shaped their application of wisdom in their universities (Peterson, 2016). The WBLM was presented as a leadership training and development tool to the Academy of Human Resource Development International Research Conference in the Americas (Ludden, 2015).

Ludden's (2015) WBLM also offered the unique benefits of being focused on wisdom (and wise action) as related to organizational leadership. Both the Berlin wisdom paradigm (Baltes & Kunzmann, 2004; Baltes & Smith, 1990, 2008; Baltes & Staudinger, 1993, 2000) and the 3D-WS (Ardelt, 2003, 2004b) focused on wisdom as thought processes. Neither model offered an action component as does the WBLM, and neither focused on wisdom as related to leadership. Leaders who seek to increase their wisdom need operational models and tools drawn from academic research. This study examined the WBLM as a wisdom development tool.

Research Hypotheses

This study examined the perception of wisdom among leaders of a global privately held company headquartered in Midwestern United States. This organization has several thousand employees and does business in 135 countries.

This research was expected to show that the organizational leaders agree that the ten constructs of the WBLM, which include knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality, independently captured the essence of the construct it represents. Further, the research was expected to show that the leaders agreed that the ten constructs comprising the WBLM describe wisdom in organizational leaders. Finally, the research was expected to demonstrate that organizational leaders believed that developing wisdom in leaders is important.

The following hypotheses were tested:

• H_{A1}: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

• H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality— describe wisdom in organizational leaders.

• H_{A3}: Organizational leaders will agree that they perceive developing wisdom in leaders is important.

Receiving formal permission from and building on the previous study of Livingston (2012) in his work with executive coaches, this research utilized both Ludden's (2015) WBLM and Livingston's (2012) questions regarding wisdom. Peterson (2016) also used a variation of Livingston's questions in his study of Christian college presidents. Thus, the hypotheses used in this study reflected those used by Livingston and Peterson and sought to test if the results of their studies were comparable to the perceptions of business leaders.

Definition of Terms

The following relevant terms were important distinctions in the study.

A *leader* has managerial authority and responsibility (Kilburg, 2006). Within the study organization, officers, directors, managers, supervisors, and team leaders were all considered leaders.

While wisdom has many definitions, the concept of wisdom changes slightly when applied directly to leadership. This study used Ludden's (2013) definition:

> Wisdom is a dynamic process a leader uses to apply knowledge, experience, and virtue to seek truth that subsequently governs the leader's actions and decisions for the organization. Wisdom engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement. Wisdom is manifested by continuously seeking more knowledge, experience, and virtuosity to achieve these ends. (p. 1)

The Ludden (2013) definition of wisdom is comprised of the following constructs:

- *Knowledge* is acquired in formal and non-formal learning environments and is balanced with knowledge about the organization.

- *Experience* is acquired through interaction with things, activities, media, events, organizations, institutions, and society.

- *Community* includes ideas, thoughts, values, morals, and knowledge acquired from family, friends, neighbors, fellow students, coworkers, civic groups, religious groups, and culture.

- *Critical thinking* uses cognitive skills that include remembering, understanding, applying, analyzing, synthesizing, evaluating, and creating.

- *Reflection* is sense making of a person's interaction with things, activities, media, events, organizations, institutions, and society.

- *Deliberation* involves engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and prepare for implementing action.

- *Authenticity* is understanding the worldview, values, ethics, and morals that are an essential part of a person and acting in accordance with these integral elements of oneself.

- *Courage* is fortitude to carry out those actions and decisions one knows to be right despite opposition or the potential for failure.

- *Collaboration* is acting within the context of one's meaning and/or purpose in life in a way that enables others to do the same while striving together to achieve the purpose of the organization.

- *Spirituality:* Most religions and cultures recognize that wisdom is not developed individually but in community. The community often seeks its wisdom from a

higher power or being. Continuous spiritual growth and formation that is planned and intentional is fundamental to acquiring and refining personal wisdom.

Assumptions Guiding the Study

Several assumptions provided the underlying framework for this study. Because the subject of this study was not a highly stigmatized or negatively sanctioned behavior, and because all responses were anonymous, it was assumed that all participants answered the questions as honestly and completely as possible (Rouse, Kozel, & Richards, 1985).

Organizational leaders were all provided with a computer and a company email address by the organization. It was assumed that they were proficient in the usage of both and, if willing, were competent to participate in the online questionnaire. Leaders had the computer skills necessary to access and participate in a survey administered online.

Organizational leaders globally were invited to participate, but the survey was in English. It was assumed that all participant leaders had conversational proficiency in English. The structure of the organization supported this assumption: The corporate headquarters is in the United States, and many leadership meetings are conducted in the United States in English. Because of this structure, organizational leaders were required by the company to have proficiency in English.

Delimitations

The focus for this study was based on the hypotheses from Livingston's (2012) dissertation, Peterson's (2016) study, and the WBLM developed by Ludden (2015). The quantitative questions used were based on Livingston's (2012) study regarding executive coaches but modified to be appropriate to this population. In addition, the qualitative

questions were revised to reflect the work of leaders within the participant organization better. While this organization does have diverse business interests, and it operates globally, the conclusions of the study were limited in the potential to generalize the results to those working in other organizations.

Brief Review of Literature

Historical Importance

Wisdom has been an ideal for which individuals strive for millennia (Staudinger & Baltes, 1996). Wisdom was presented as a supreme goal in Old Testament books written as much as 6,000 years ago (Buzzell, Boa, & Perkins, 1998). Thousands of years later, Socrates, Plato, and Aristotle recognized that wisdom manifested in two forms—practical wisdom, *phronesis*, and philosophical wisdom, *sophia* (Takahashi, 2000).

Takahashi (2000) explained that St. Augustine later divided human intellect into *Scientia* (i.e., knowledge of the material world) and *Sapientia* (i.e., knowledge of the Christian God), and Assmann (1994) noted that at that time all wisdom was believed to come through God's grace. From the medieval period through the Renaissance, wisdom was considered the fulfillment of human life and the purpose of creation (Trowbridge & Ferrari, 2011).

Current Wisdom Definitions

Despite wisdom being a focal point of discussion and literature for as many as 6,000 years, wisdom still has no commonly accepted definition (Ardelt, 2003; Jeste et al., 2010). Plato tried to separate the concepts of intelligence, knowledge, and wisdom, and scholars are still working on it.

Explicit wisdom theories. Scholars at the Max Planck Institute for Human Development and Education have developed the Berlin wisdom paradigm, which defined wisdom as expert-level knowledge and judgment in the fundamental pragmatics of life, permitting exceptional insight, judgment, and advice involving complex and uncertain matters of the human condition (Baltes & Kunzmann, 2004; Baltes & Smith, 1990, 2008; Baltes & Staudinger, 1993, 2000; Smith & Baltes, 1990; Staudinger & Baltes, 1996; Staudinger, Maciel, Smith, & Baltes, 1998).

Practical wisdom is knowledge-based conceptualization of wisdom that is oriented toward application in business management and leadership. Practical wisdom highlights the moral dimension of wisdom (Roca, 2008). Practical wisdom is a way to actively consider the moral and ethical considerations, as opposed to making decisions through mechanical calculations (Provis, 2010). Self-control, courage, fairness, generosity, gentleness, friendliness, and truthfulness are virtuous traits that Aristotle put forth as human good behavior; and the virtue at the heart of this list was practical wisdom (Schwartz & Sharpe, 2010).

Implicit wisdom theories. Ardelt (2004b) argued that wisdom should not be reduced to expertise, and the term wisdom should be reserved for wise persons rather than expert knowledge. Ardelt offered an alternative model of wisdom: wisdom as a three-dimensional personality characteristic (3D-WS). These three dimensions are cognitive, reflective, and affective. The cognitive dimension of wisdom is the desire to know the truth and gain a deeper understanding of life. The reflective dimension represents self-awareness, self-examination, and the ability to see events from different

perspectives. The affective component is a person's sympathetic and compassionate love for others.

Webster (2003) agreed that wisdom is a multidimensional construct; however, he posited that the specific dimensions were still open to interpretation. Webster proposed the following five components of wisdom: experience, emotional regulation, reminiscence and reflectiveness, openness, and humor. Webster explained that wisdom emerges through the successful management of life's difficulties.

Balance theory of wisdom. Sternberg's balance theory of wisdom differs from the explicit wisdom paradigm and from Ardelt's definition: "Wisdom, I suggest, inheres in an interaction among person, task, and situation" (Sternberg, 2004b, p. 287). Sternberg noted that someone who is wise in one context is not necessarily wise in another, and no one is wise all the time. Sternberg claimed that the best approach to studying wisdom is a balance between the methodology of the Berlin Group and that used by Ardelt.

Sternberg (1998) defined wisdom as the extent to which a person uses intelligence, creativity, and experience to reach a common good, a good in balance with intrapersonal, interpersonal, and extrapersonal interests. Sternberg (2003) argued that leadership has three key components: wisdom, creativity, and intelligence, synthesized (WICS). Sternberg (2007b) called WICS a systems model of leadership. These three components form a system that impact how a leader formulates, makes, and acts on decisions.

Wisdom and Business Leadership

Callahan (2009) listed wisdom as one of the most important virtues a leader can possess. Küpers (2007) noted that wisdom is becoming increasingly important for dealing with the challenges of current business contexts. Kaipa (2014) explained that the change of pace today is faster than ever, and the business environment is becoming increasingly complex. Perhaps that is why examples of foolish leadership are so prevalent.

Schwartz and Sharpe (2010) claimed that Americans are growing increasingly disenchanted with the institutions on which they depend. This disenchantment is due in no small part to the ethical failures and foolish decisions of CEOs in major companies. As a result, "In a very short period, CEOs have gone from 'most admired' status to 'least trusted'" (Dotlich & Cairo, 2003, p. xvii). Küpers (2007) argued that unwise business decisions have led to unethical and illegal actions and, eventually, to corporate scandals and frauds on an unprecedented scale.

Provis (2010) associated wisdom with the ability to make ethical decisions in business. Schwartz and Sharpe (2010) posited that practical wisdom is the solution to the unethical behavior by leaders and, ultimately, the cure for the growing disenchantment felt by the American people. In fact, "practical wisdom may be essential for human happiness" (2006, p. 379).

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Research Methods and Procedures

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Description of the population

The target participants for this research were leaders within a global organization headquartered in the Midwestern United States. The leadership population in this

instance was defined as individuals who have managerial authority and responsibility. This organization, while headquartered in the Midwest, has businesses worldwide. Also of note, these businesses are in various fields, including but not limited to medical device manufacturing, raw material manufacturing, medical research, aviation, and hospitality. This diversity of fields could potentially make the findings more generalizable.

Selection of Participants

An email list of leaders was obtained from Human Resources (HR). An email from the researcher and HR was sent the week prior to the questionnaire invitation that explained the intent of the survey. This initial email prepared leaders to receive the survey and reassured them that it was not an officially mandated questionnaire. Leaders globally were invited to participate, but the survey was not translated into other languages. Leaders within the organization are required to be conversant in English due to their need to interact with the organization headquarters in the United States.

Data Collection Methods

The survey instrument was based on the WBLM (Ludden, 2015). The WBLM is specifically focused on developing wisdom in leaders. Ludden (2009) developed the WBLM to represent the dynamic process of wise leadership. This dynamic process has ten constructs: knowledge, experience, community, critical thinking, reflection, deliberation, integrity, courage, collaboration, and spirituality. The survey instrument measured leader agreement with these ten constructs, gauging their perceptions of wisdom development in organizational leaders. This instrument is proven to be valid and reliable and was used by Livingston (2012) and Peterson (2016).

Procedures for Data Collection

The week after the initial introductory email, leaders were emailed an invitation to participate in the WBLM questionnaire through SurveyMonkey (https://www.surveymonkey.com). The WBLM was prefaced with a short demographic questionnaire. The use of the online survey instrument allowed the researcher to gain insight into the participants' perceptions of wisdom while maintaining participant anonymity.

The survey was administered on a 7-point Likert scale. This scale was different from the one used by Peterson (2016), which was a 5-point scale. The scale chosen included the following options: *Strongly Disagree*, *Somewhat Disagree*, *Neither Agree or Disagree*, *Somewhat Agree*, *Agree*, and *Strongly Agree*, with seven equidistant points and an easily visually identified middle. The scale had no numbers. The survey contained skip logic. Depending on how the participants answered certain questions, they were taken to the appropriate point in the survey. For example, if a participant answered *Neither Agree or Disagree* or above on the scale, then he or she continued to the next quantitative question. If a participant answered less than *Neither Agree or Disagree*, he or she was directed to a qualitative question. After answering the qualitative question, the participant was taken back to the next quantitative Likert scale question in the survey. Using this skip logic allowed participants who disagreed with the wisdom description to explain how they would modify it so that they would agree.

To help ensure a strong response rate, a reminder email was sent to all participants when three days remained in the survey period. This reminder thanked the

participants again for their help with this research and encouraged anyone who had not yet responded to do so within the next week.

Analysis of the Data

Once the open survey period had passed (i.e., two weeks), the responses were compiled and then analyzed using SPSS (IBM SPSS Statistics, Version 24) and QDA Miner (Version 2.0.1; Provalis, 2016). SPSS is a statistical analysis tool that was used to quantify the Likert scale responses. QDA Miner (Version 2.0.1; Provalis, 2016) is qualitative analysis software that assisted with sorting the open-ended qualitative responses into themes and categories.

Contribution to Leadership Studies

Literature clearly shows the need for wisdom in leaders (Boyatis, Smith, & Blaize, 2006; Callahan, 2009; Case & Gosling, 2007; Dunham, 2010; Holliday, Statler, & Flanders, 2007; Küpers & Statler, 2008; Ludden, 2009; McKenna et al., 2009; Sternberg, 2003, 2008a; Yang, 2011). No commonly accepted definition of wisdom exists, and there are more questions than answers as to how wisdom is acquired or cultivated. Leaders within the participant organization are faced with the hectic schedule and challenges typical of a large organization; they worry about issues such as deadlines, market share, profitability, product quality, and personnel. The need for wisdom would be easily overlooked or lost in the midst of the constant demands for attention and time. This study examined the perceptions of wisdom by these busy leaders.

The need to further the understanding of wisdom in leaders is clear. McKenna et al. (2009) noted that wisdom is particularly appropriate for contemporary leadership, stating, "As organizations become more complex, they demand no less than wise

leadership if they are to survive" (p. 185). Other wisdom studies (Hira & Faulkender, 1997; Smith & Baltes, 1990) asked an unrelated third party to judge the wisdom in participants' choices. This study used a validated instrument (i.e., the WBLM) to measure leaders' perceptions of wisdom. While these results were not broadly generalizable, the data allowed for some additional insight into the development of wisdom in leaders.

CHAPTER TWO—LITERATURE REVIEW

The concept of wisdom is ancient, and the writings on wisdom through the ages have universally advocated seeking it. While the word *wise* is still used in everyday language, the intended and perceived meaning of *wise* is inconsistent (Bangen, Meeks, & Jeste, 2013). Clearly, seeking wisdom and acting wisely are no longer central endeavors of the human experience. This lack of wisdom seeking is exemplified by the foolish behavior of CEOs of powerful companies such as Enron, GM, Tyco, Lehman Brothers, and Washington Mutual (Finkelstein, 2003; Nonaka & Takeuchi, 2011). Nonaka and Takeuchi (2011) stated that the ability to lead wisely has nearly vanished. That possibility is particularly troubling when considering the assertion by Yang (2011): "Wisdom and leadership are important for a high quality of life for individuals and the cultural advancement of society" (p. 616). This review of the literature examined both the historical roots of wisdom and modern wisdom constructs. The goal of this literature review was to build a foundational understanding of the wisdom concept to support a framework for the research and methodology of this study.

Historical Importance

The historical importance of wisdom cannot be overstated. For millennia wisdom has been an ideal for which individuals strive (Staudinger & Baltes, 1996). The ancient Jewish writings emphasized wisdom as a key virtue. The book of Genesis is estimated to have been written between 4000–1804 B.C. (Buzzell et al., 1998), and Genesis 41:39 explained that Pharaoh chose Joseph because "there is no one so discerning and wise as

you" (New International Version). The book of Proverbs offers practical direction for

seeking and gaining wisdom and is estimated to have originated between 950–700 B.C.

As explained in Proverbs, "Wisdom is supreme; therefore get wisdom. Though it cost

you all you have, get understanding" (Prov. 4:7). This short proverb offers several

insights. First, wisdom is of the utmost importance. Second, wisdom is not easily

gained; it will be costly. Third, wisdom is not simply knowledge; wisdom includes

understanding.

Thousands of years later the Greeks were still grappling with the concept of

wisdom and how it should be defined. Socrates, Plato, and Aristotle recognized at least

two types of wisdom: practical wisdom, *phronesis*, and philosophical wisdom, *sophia*

(Takahashi, 2000). In *The Republic* Plato (trans. 1992) discussed the virtues a society

should have, and wisdom is listed as a state's first virtue. In Plato's discussion of

wisdom, a clarification as to the nature of wisdom can be found. Plato clearly explained

that although knowledge may be a component of wisdom, wisdom and knowledge are not

synonymous. Sophia is the ultimate form of knowledge about the true nature of things;

however, while most people at that time believed that only the gods could possess *sophia*,

the Greek sages believed seeking it was important (Takahashi, 2000). Wisdom,

according to Plato (trans. 1992), is knowledge combined with good judgment.

Aristotle (trans. 2006), Plato's student, later examined wisdom in *Metaphysics*.

Aristotle approached wisdom from an epistemological standpoint, examining the why of

wisdom and perception. Aristotle saw five ways of arriving at the truth: art (*techne*),

science (*episteme*), intuition (*nous*), theoretical wisdom (*sophia*), and practical wisdom

(*phronesis*; Blockley, 2015). Aristotle noted that sense perception is something almost

anyone can do; to him these common perceptions were not considered wisdom. People with experience were considered by Aristotle to be wiser than those with mere sense perception. The wisest of all men, according to Aristotle (trans. 2006), is the artist. Aristotle explained that people of experience "know that a thing is so, but know not why, while the others [artists] know the 'why' and the cause" (p. 3). Aristotle added the requirement of complete understanding to Plato's definition of wisdom as knowledge and good judgment. Knowing and acting are insufficient for wisdom without also understanding why. In fact, Plato and Aristotle echoed what the Bible states explicitly many times: "Blessed is the man who finds wisdom, the man who gains understanding" (Prov. 3:13).

This concept of wisdom was later reorganized by St. Augustine, who divided human intellect into *Scientia* (i.e., knowledge of the material world) and *Sapientia* (i.e., knowledge of the Christian God; Takahashi, 2000). However, most people at that time believed that true wisdom belonged only to God, and the only way to receive it was through grace (Assmann, 1994). From the medieval period through the Renaissance wisdom was considered the fulfillment of human life and the purpose of creation (Trowbridge & Ferrari, 2011). As modern science gained precedence, the tradition of wisdom as powerful, contemplative, rational thought ended up as disparaged, forgotten, and ignored by leading scholars (Trowbridge & Ferrari, 2011). As Assmann (1994) explained, wisdom "was lost in the evolutionary process of civilization" (p. 190).

Current Wisdom Definitions

While the ancients wrote of wisdom, and wisdom clearly played a central role in their value system, there has been a dearth of discussion about wisdom in recent history.

Case and Gosling (2007) noted, "To talk seriously in professional academic circles about the value of 'wisdom' in this day and age is to risk appearing quaint, old fashioned or downright naive" (p. 88). While contemporary scholarly writing on wisdom was difficult to find prior to a few years ago, that situation is changing. Wisdom literature is experiencing resurgence in the last two decades, especially in the areas of leadership and psychology (Küpers & Statler, 2008).

Defining the separation between the concepts of intelligence, knowledge, and wisdom has been a struggle since the time of Plato. Meacham (1990) reiterated this separation: "I have concluded that the essence of wisdom is to hold the attitude that knowledge is fallible and to strive for a balance between knowing and doubting" (p. 181). As Meacham noted, wisdom is striving for balance, and the act of striving is by definition not easy. Birren and Fisher (1990) claimed that the essence of wisdom may be a question of degree. Assmann (1994) concurred, noting that, generally, people are neither completely wise nor completely foolish; they are irrational mixtures of both. Assmann argued that those who act competently enough to be called wise are notoriously few, and they are not thoroughly wise either.

The concept that people are constantly in flux between wise and foolish behavior, never fully reaching either extreme, may contribute in part to the difficulty in defining wisdom. Despite wisdom being a focal point of discussion and literature for up to 6,000 years, it still has no commonly accepted definition (Ardelt, 2003; Jeste et al., 2010). The current literature generally describes wisdom as somewhere on the spectrum between explicit earned knowledge and implicit personality characteristics. Descriptions of some of the leading theories follow.

Explicit Wisdom Theories

Berlin wisdom paradigm. In an effort to allow empirical analysis of wisdom, scholars at the Max Planck Institute for Human Development and Education have defined wisdom as expert-level knowledge and judgment in the fundamental pragmatics of life, permitting exceptional insight, judgment, and advice involving complex and uncertain matters of the human condition (Baltes & Kunzmann, 2004; Baltes & Smith, 1990, 2008; Baltes & Staudinger, 1993, 2000; Smith & Baltes, 1990; Staudinger & Baltes, 1996; Staudinger et al., 1998). They argued that the characteristics of wisdom are obtained through "fine-tuned coordination of cognition, motivation, and emotion" (Staudinger et al., 1998, p. 2).

In this paradigm the term *wisdom* is reserved for only the highest level of performance; lower levels are denoted as wisdom-related (Staudinger & Baltes, 1996). The label *wise* is associated with expert-level performance in a specific life domain. Exceptional insight, good judgment, or good advice about life matters summarize the essence of a wise response and the outcome of expert knowledge (Smith & Baltes, 1990). Wisdom can be further defined as possessing these properties: (a) Wisdom represents a truly superior level of knowledge, judgment, and advice; (b) wisdom addresses important and difficult questions about the conduct and meaning of life; (c) wisdom includes knowledge about the limits of knowledge; (d) wisdom constitutes knowledge with extraordinary scope, depth, measure, and balance; (e) wisdom involves a perfect synergy of knowledge and virtues; (f) wisdom represents knowledge used for the good and well-being of oneself and others; and, (g) wisdom, although difficult to achieve and to specify, is easily recognized by others (Baltes & Staudinger, 2000, p. 123).

The studies conducted under this wisdom paradigm presented each participant plausible scenarios about which the participant could make a judgment or offer an opinion. The scenarios were not about the participant's own life; the interest was in the participant's general knowledge of the domain, not in the way he or she applied that knowledge personally (Smith & Baltes, 1990). Trained raters then scored the responses to these scenarios.

Another construct of this wisdom definition is that it is largely interactive: "One might even argue that wisdom by definition will hardly ever be found in an individual operating in isolation, but rather will be found in contexts that are shaped by multiple interactive minds" (Staudinger & Baltes, 1996, p. 746). Unfortunately, as Staudinger and Baltes noted, most of the empirical research on wisdom has been on isolated individuals. They give three reasons that wisdom must be interactive: (a) Wisdom involves social interaction in its ontogenesis; (b) applying wisdom entails the interaction of minds; and, (c) evaluating and validating wisdom involves interactive minds. In short, wisdom is a social phenomenon. This social requirement, the authors claimed, is because the body of knowledge and skills related to wisdom is too large to be stored in one person's mind. Staudinger and Baltes (1996) found that "any performance setting that ignores the interactive-minds aspect of wisdom clearly underestimates wisdom-related performance capacity" (p. 758).

Practical wisdom. Practical wisdom is another knowledge-based conceptualization of wisdom that is oriented toward application in business management and leadership. However, unlike pure knowledge, which can be generated abstractly, practical wisdom remains tied to concrete experiences, which include all of the social,

emotional, and perceptual dimensions of human life (Küpers & Statler, 2008). "Practical wisdom is not only a kind of knowledge, but also a way of knowing that relies upon character as a way of being" (Gibson, 2008, p. 530). As Gibson noted, the reliance on character is a key element to practical wisdom. Practical wisdom is a reinterpretation of the Aristotelian concept, which in the current parlance highlights the moral dimension of wisdom (Roca, 2008). The ethical focus of practical wisdom is an important change from the conventional business worldview. Nonaka and Takeuchi (2011) explained, "The prevailing principles in business make employees ask, 'What's in it for me?' Missing are those that would make them think, 'What's good, right, and just for everyone?'" (p. 59). Roca (2008) noted that moral considerations in business have been suppressed by making business studies a science. Because the methodology and rationality of science results in morally neutral business models, students of business have not been instilled with any sense of moral responsibility. Branick (2006) was more forceful, stating that not only is business divorced from ethical considerations, the pressures in business make it very difficult for good people to make good ethical decisions. A similar observation was made by Nonaka and Takeuchi (2011), "Individuals who may do the right thing in normal situations behave differently under stress" (p. 59). The literature describes business as an environment that is divorced from ethical considerations and where leaders are exposed to abnormally high stress; a recipe for unethical behavior.

Now however, many scholars view recent business scandals and failures as a sign that ethics and morals should be essential to business leadership, and they advocate practical wisdom as a way to change the amoral business mind-set (Holliday et al., 2007; Khan & Altaf, 2015; Nonaka & Takeuchi, 2011; Roca, 2007, 2008). Roca (2008) posited

that every management action supposes a moral stance. Roca (2007) noted that, "According to Aristotle, moral content is always present in practical affairs" (p. 197). Practical wisdom is a way to consider the moral and ethical considerations actively, as opposed to making decisions through mechanical calculations (Provis, 2010). Holliday et al. (2007) explained that practical wisdom is a way for leaders optimally to integrate the demands for ethics and effectiveness in organizations faced by complexity and uncertainty. The challenge of practical wisdom is that although it is knowledge based, it is not objective knowledge that can be handed down; practical wisdom is the culmination of knowledge gained through experience (Küpers & Pauleen, 2015). Schwartz and Sharpe (2006) called practical wisdom the master virtue, stating that all other virtues will fail to produce effective action without practical wisdom.

Implicit Wisdom Theories

Wisdom as a three-dimensional personality characteristic. As a contrast to the Berlin wisdom paradigm, Ardelt (2004b) argued that wisdom should not be reduced to expertise and the term *wisdom* should be reserved for wise persons rather than expert knowledge. Ardelt claimed that the Berlin wisdom paradigm assesses intellectual knowledge in the wisdom domain fundamental pragmatics of life rather than wisdom itself. Ardelt's critique of the Berlin wisdom paradigm is that it claims that wisdom exists independently of wise individuals and that a person cannot be wiser than the collectively anchored product of wisdom.

Ardelt (2000) argued that wisdom cannot exist independently of individuals. When attempts are made to preserve wisdom, then it is no longer connected to a person and becomes intellectual knowledge: "I propose that even the most profound 'wisdom

literature' remains intellectual or theoretical knowledge until its inherent wisdom is realized by a person" (Ardelt, 2004b, p. 260). Consequently, Ardelt argued that the Berlin group's research approach in using general hypothetical problems was unlikely to measure wisdom but rather assessed intellectual knowledge.

Instead, Ardelt (2004b) argued that wisdom should be measured by assessing the wisdom of people rather than the apparent wisdom of their responses. She clarified, "I do not advocate studying wise people to determine what wisdom is because model exemplars of wisdom are hard to find" (Ardelt, 2004a, p. 305). Ardelt (2004b) offered an alternative model of wisdom: wisdom as a three-dimensional personality characteristic. These three dimensions are cognitive, reflective, and affective.

Ardelt (2004b) explained the three dimensions in more detail. The cognitive dimension of wisdom is the desire to know the truth and gain a deeper understanding of life. The reflective dimension represents self-awareness, self-examination, and the ability to see events from different perspectives. The affective component is a person's sympathetic and compassionate love for others. Ardelt acknowledged that this combination of characteristics might only rarely be found in a person to a high degree. However, if wisdom is a continuum that ranges from very low to very high, assessment becomes possible to measure how close people are to this ideal state.

Yang (2013) noted that personal involvement is vital for the manifestation of wisdom: "An individual who has a significant amount of general life knowledge but leads a miserable life (based on the person's own standards as well as others) is seldom viewed as wise. That person may be intelligent, but not wise" (p. 121). Yang explained that

these unwise individuals might give excellent advice for a given situation, yet their advice is seldom sought because their intelligence has never been manifested as wisdom.

Ardelt (2004a) emphasized the personalization of wisdom, explaining that wisdom-related knowledge must be realized by a person through a reflection on personal experiences in order to be called wisdom: "Wise people do not necessarily know more facts than other individuals, but they comprehend the deeper meaning of the generally known facts for themselves and others" (Ardelt, 1997, p. 16). Ardelt's three-dimensional model was not derived from an empirical study of wise people; rather, it represents the ideal wise person.

Self-assessed wisdom scale. Webster (2003) agreed with both the Berlin Group and Ardelt that wisdom is a multidimensional construct. However, he posited that the specific dimensions were still open to interpretation. Webster proposed the following five components of wisdom: experience, emotional regulation, reminiscence and reflectiveness, openness, and humor.

Webster (2003) explained that wisdom emerges through the successful management of life's difficulties. The accumulated proficiency in dealing with problems over the course of a lifetime explains, in part, the association in people's minds with wisdom and age. However, Webster argued, "it is not the accumulated *general* experience per se that leads to wisdom, but in contrast, experiences that are difficult, morally challenging, and require (or perhaps enable) some degree of profundity" (p. 14). Webster (2007) referred to this distinction as critical life experience. He also noted that while problematic and disturbing life episodes seem to receive the focus as meaning-making and wisdom-generating events, the importance of powerful optimistic

experiences should not be discounted: "In short, consequential events of both a positive and negative nature profoundly shape and enrich psychological growth and development" (pp. 167–168).

Emotional regulation provides wise people an opportunity to use the wisdom they have gained without reacting mindlessly to the impetus of emotion: "Recognizing, embracing, and employing emotions in a constructive and creative way is a benchmark of wisdom" (Webster, 2007, p. 166). Webster (2003) explained that a wise person can identify and discriminate among his or her emotions and use that knowledge for problem resolution.

Webster (2007) pointed to reminiscence and reflectiveness as the methods through which wisdom is gained from critical life experiences. He noted that critical life experiences do not necessarily contribute to wisdom unless they are reflected upon and learned from. Webster (2003) posited, "Examining one's life creates opportunities to identify both personal strengths and weaknesses … [and] allows us to explore the meaning of our lives to date" (p. 15). Webster (2007) explained that seeking these insights allows people to be better prepared for similar issues in the future.

According to Webster (2003), openness permits wise people to surmount life obstacles effectively. He stated that most nontrivial problems stem from multiple sources, and an openness to alternative views, information, and potential solutions optimizes the chances of successful resolution. "Exploring possibilities, entertaining discordant opinions, and investigating novel approaches to ongoing conundrums builds a repertoire of skills from which the wise person can draw when confronting life's challenges" (Webster, 2007, p. 166).

Finally, Webster (2007) discussed the humor component of wisdom. He noted that while humor has received passing attention as a wisdom component, systematic investigation into the connection of wisdom and humor are lacking. Nevertheless, Webster stated that recognition of irony, stress reduction, and prosocial bonding are types of humor that fall within the purview of wisdom. He posited, "Wise persons develop a penchant for not taking themselves too seriously" (p. 167). Webster's inclusion of humor as a wisdom component is supported by Sternberg's (2004a) imbalance theory of foolishness, and Dotlich and Cairo's (2003) barriers to wisdom.

Balance Theory of Wisdom

Sternberg (1998) developed the balance theory of wisdom, which defined wisdom as

> the application of tacit knowledge as mediated by values toward the goal of achieving a common good (a) through a balance among multiple intrapersonal, interpersonal, and extrapersonal interests and (b) in order to achieve a balance among responses to environmental contexts: adaption to existing environmental contexts, shaping of existing environmental contexts, and selection of new environmental contexts. (p. 353)

Sternberg argued that wisdom, although related to practical intelligence, is distinctly different than practical intelligence; "Practical intelligence may or may not involve a balancing of interests, but wisdom must" (p. 355). In Sternberg's view wisdom is a special case of practical intelligence, one that requires the balancing of multiple and possibly competing interests. .

Sternberg's (2004b) balance theory of wisdom differs from the explicit wisdom paradigm and from Ardelt's definition: "Wisdom, I suggest, inheres in an interaction among person, task, and situation" (p. 287). Sternberg noted that someone who is wise in one context is not necessarily wise in another, and no one is wise all the time. Sternberg also chose the middle ground on the proper method for measuring wisdom. He noted that the Berlin group used hypothetical scenarios, and Ardelt believed that personal examples are required. Sternberg claimed that the best approach is a balance between the two.

Sternberg's (1998, 2004b) balance theory of wisdom formed the basis for his WICS model of leadership (2003, 2005a, 2005c, 2008a, 2008b, 2009). Sternberg (2003) argued that leadership has three key components: wisdom, intelligence, and creativity, synthesized (WICS). WICS is the concept that these three components working together are required for effective leadership. Sternberg claimed that a leader can have intelligence and creativity but lack the most important quality a leader can have: wisdom. Sternberg (1998) defined wisdom as the extent to which a person uses intelligence, creativity, and experience to reach a common good—a good in balance with intrapersonal, interpersonal, and extrapersonal interests.

Sternberg (2007b) called WICS a systems model of leadership. These three components form a system that impact how a leader formulates, makes, and acts on decisions. One key aspect to WICS as a systems model of leadership is the recognition that these attributes are not traits. The term *trait* is generally associated with characteristics that are minimally modifiable, whereas the WICS characteristics are modifiable forms of developing expertise. Sternberg argued that wisdom can be taught or, at least, enhanced.

Wise leaders balance the interests of all stakeholders. They align the interests of their organization with those of other organizations, and wise leaders consider the long-term goals instead of short-term benefits (Sternberg, 2007b). Sternberg (2004a) offered the imbalance theory of foolishness as a counterpoint to the balance theory of wisdom. In the imbalance theory of foolishness, Sternberg (2004a) explained five factors that dispose leaders toward foolishness:

- *Unrealistic optimism* is the belief that one is so smart or powerful that one's actions cannot possibly fail. If one acts, the outcome will be fine; simply by virtue of the one acting.

- *Egocentrism* is when one thinks that one's own interests are the only ones which are important.

- *(False) sense of omniscience* is the result of having available any desired information. For example, staffers feed information to an important leader, but to an outsider it appears that the leader is extremely knowledgeable. The leader then comes to believe that he or she is all-knowing.

- *(False) sense of omnipotence:* with the ability to wield extreme power can grow the feeling that this power extends to all areas of life.

- *(False) sense of invulnerability* comes from an illusion of complete protection. This is often the result of a large staff that shields the leader from the outside. (p. 146)

Sternberg (2004a) provided examples of foolish people who are intelligent: Bill Clinton, Neville Chamberlin, Richard Nixon. Clinton had an affair while in office and lied about it. Chamberlin will forever be associated with appeasement as he watched Nazi Germany

expand mercilessly. Nixon's Watergate scandal will remain a low point in American political history. Sternberg (2015) noted that people can be smart, both in terms of IQ and successful intelligence, and yet be very unwise.

Sternberg (1998, 2004a) offered this theory as an example of the difference between intelligence and wisdom. In Sternberg's view wisdom requires balance, and imbalance results in foolishness; "An evil genius may be academically intelligent; he or she may be practically intelligent; he or she cannot be wise" (Sternberg, 2004a, p. 147). There exists no such thing as selfish wisdom, a concept that can be well applied toward leadership.

Operational Definition of Wisdom: WBLM

Ludden's (2009) wisdom definition and model were chosen as the operational models for this research for a few reasons. First, they provided a good synthesis of the wisdom theories to date. Second, this wisdom definition was specifically oriented to wisdom in leaders as opposed to personal or private wisdom. Third, this wisdom model incorporated the construct of spirituality, which in this author's worldview is a fundamental part of acting wisely. The WBLM definition of wisdom follows:

> Wisdom is a dynamic process a leader uses to apply knowledge, experience, and virtue to seek truth that subsequently governs the leader's actions and decisions for the organization. Wisdom engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement. Wisdom is manifested by continuously seeking more knowledge, experience, and virtuosity to achieve these ends. (Ludden, 2009, p. 1)

Ludden explained that wisdom is organic and intricate and is very difficult to explain in a straightforward way. One of the key differences between WBLM and other wisdom models is that it is a dynamic as opposed to a static representation of traits, characteristics, or knowledge. Ludden's (2013) model illustrates the action of seeking wisdom. Figure 1 depicts the model to aid in comprehending this concept.

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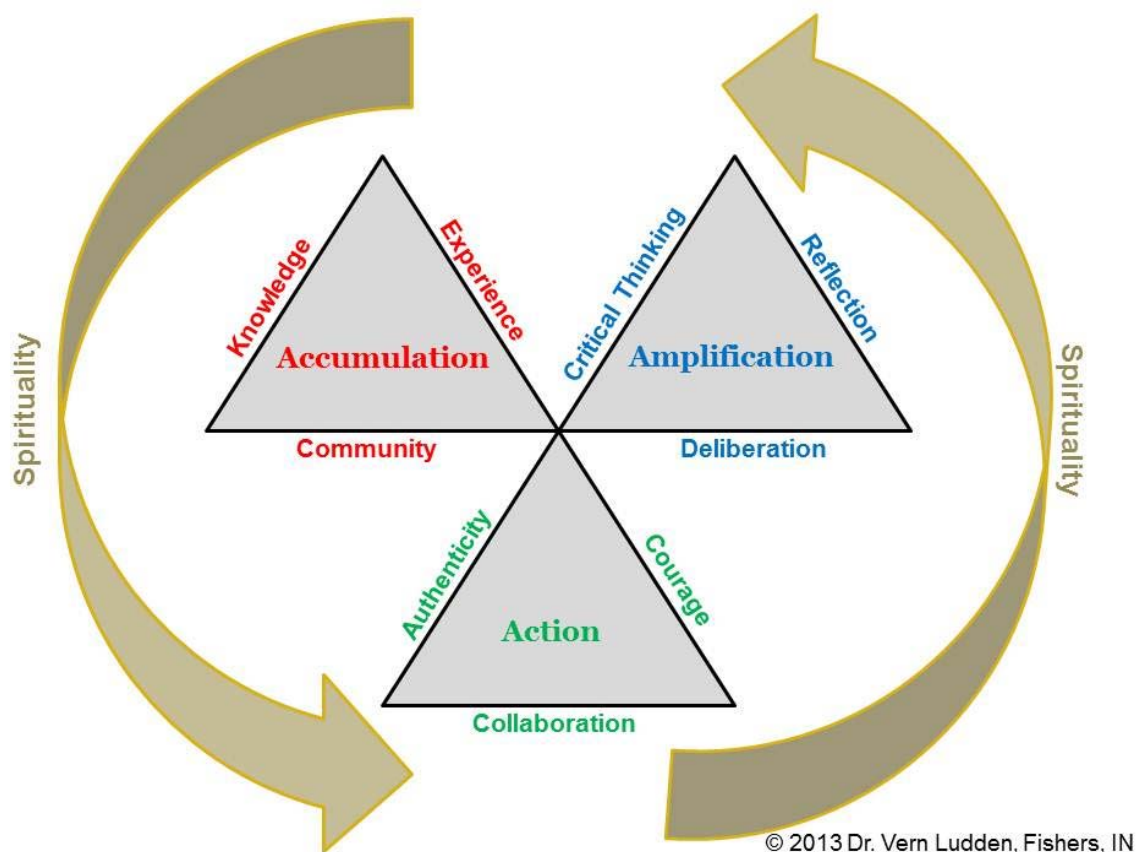
Figure 1. Visualization of the WBLM.

Ludden (2013) described the visualization of the WBLM,

An important aspect of the model is recognizing wisdom as the integration of an individual's cognitive, affective, and conative processes. In other words, wisdom is a combination of thinking, feeling, and acting. In addition, the model contains three separate progressions (accumulation, amplification, and action) that are both

discrete but dynamically interrelated. The connectedness of the three processes is represented by assigning the same colors to related constructs of each process. (p. 2)

<div align="center">**Accumulation**</div>

As seen in Figure 1, the WBLM has three stages. The accumulation stage of wisdom involves the process of continuous learning through the acquisition of knowledge, through the pursuit of a variety of experiences, and by exposure to new ideas through involvement in communities of people (Ludden, 2013). The following sections explain each step in the accumulation of wisdom in more detail.

Knowledge

The ancient wisdom tradition was predicated on the accumulation of knowledge and the development of the skills needed to utilize that knowledge (Takahashi, 2000). Knowledge remains a central tenet of wisdom literature. The Berlin Group investigated wisdom as a domain of knowledge about life (Smith & Baltes, 1990). Not all knowledge is equally useful or applicable to the acquisition of wisdom. The Berlin Group makes this distinction in their definition of wisdom-related knowledge, calling it "knowledge and judgment about the essence of the human condition and the ways and means of planning, managing, and understanding a good life" (Baltes & Staudinger, 2000, p. 124). Wise business leaders gather knowledge both formally and informally and balance operational knowledge with knowledge about the organization (Ludden, 2013).

Meacham (1990) explained succinctly, "The essence of wisdom, therefore, is to hold this attitude toward knowledge, that knowledge is fallible" (p. 183). The danger in acquiring more and more knowledge is to be overly confident that one knows all that is

needed to be known. While knowledge is central to wisdom, this study does not consider wisdom to be knowledge-based. Meacham summarized this view: "The essence of wisdom is not in what is known but in how that knowledge is put to use." (p. 188). Ardelt (2004b) described it another way, stating that only when an individual realizes the truth of his or her knowledge can knowledge make that person wiser.

Experience

Both laypeople and scholars generally believe that wisdom may be gained by learning from life experience (Yang, 2014). Jeste et al. (2010) found a general agreement in their survey of subject matter experts that wisdom is experience driven. However, Sternberg (2005b) noted, "Experience does not create wisdom. Rather one's ability to profit from and utilize one's experience in a reflective and directed way is what determines how wisdom develops" (p. 6). In other words, actively learning from experiences is crucial for the development of wisdom.

The connection between wisdom and experience also explains the general belief that wisdom is acquired with age. Human records have for millennia shown a popularly held belief that aging is associated with wisdom (Edmondson, 2005). Wisdom can be perceived as a special quality that comes with age:

> To grant that younger people might also be wise would be to give away that special quality that comes with aging. Thus for older people as well as for younger people, the commonplace association of wisdom with aging reflects primarily a motivation or need to have such an association hold true. (Meacham, 1990, p. 197)

While the perceived connection between wisdom and age is understandable, any actual correlation is more tenuous. Yang (2014) noted, "However, neither wisdom nor the abilities to manifest wisdom come with age automatically" (p. 129). Pasupathi, Staudinger, and Baltes (2001) explained that during adulthood the development of wisdom-related knowledge is not a normal, automatic process. Ludden (2013) described experience as being acquired through interaction with things such as activities, media, events, organizations, institutions, and society. While age does imply more experience, it certainly does not ensure more meaningful experience. As Ludden noted, experience requires interaction; it is entirely possible to go through life with minimal interaction. Wisdom is understood at the experiential level (Ardelt, 2004b). Wisdom develops through experiences involving the successful resolution of life crises (Yang, 2014).

Community

Wisdom, by nature, is ethical. Selfish, vindictive, or cruel behavior would never be considered wise. A fundamental part of wisdom is its prosocial nature: empathy, compassion, warmth, altruism, and a sense of fairness (Bangen et al., 2013). Nonaka and Takeuchi (2011) described wisdom as the ability to make judgments and take action toward the common good.

A wise person interacts with his or her community. Wisdom requires embracing the complexity of the decision context, considering the ethics, human purposes, character, and values and thoroughly integrating that ethical analysis and reflection into a decision for the common good (Dunham, 2010). Wisdom does not exist in isolation. Even in folktales people visited the wise hermit was visited to seek advice. Bangen et al. (2013) agreed, "Possessing knowledge and good decision-making abilities but lacking prosocial

values can only make an individual smart, but not wise" (p. 1263). Wisdom must be acted upon; it must be shared; and, it must be good or it is not wisdom.

<center>**Amplification**</center>

The next stage in the WBLM involves the amplification of the knowledge, experience, and interaction with community so that the whole becomes greater than the parts (Ludden, 2013). The explanation of the steps for amplification follows.

Critical Thinking

Clearly, intelligence and knowledge play a role in wisdom. Equally clearly, neither intelligence nor knowledge is sufficient. Wisdom requires critical thinking, an ability to take the components discussed here—knowledge, context, community, ethics, and experience—and amplify them into something more. Howard, Tang, and Austin (2014) described critical thinking as higher order thinking that questions assumptions Scriven and Paul (1987) explained in more detail,

> Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness. (p. 1)

When framed in this way by Scriven and Paul, critical thinking is shown to be similar in many ways to wisdom. Wisdom in simple terms is "a theory of thinking and judging about the personal and common good" (Baltes & Kunzmann, 2004, p. 291). Actively

thinking about experiences and observations with the intent to use them as a guide for one's actions is a construct of wisdom.

Reflection

Reflection is the practice of periodically stepping back to consider the meaning of recent events. It illuminates the experience and the context, providing a basis for future action (Raelin, 2002). Raelin (2007) explained that this type of periodic reflection creates a real-time learning environment. Weick and Ashford (2000) described learning as a conscious act:

> Individuals monitor their environments, interpret what they see and formulate responses, all with some degree of consciousness regarding what they are doing. One implication of this is that to learn, individuals need to know that there is a need for learning. (p. 710)

The implication is that reflection is a learning tool, but one that must be intentionally and consciously utilized. Bandura (2003) stated that people naturally have the capability to use reflection to resolve internal conflicts, examine the meaning of their actions, and set order to priorities. However, Bandura also explained that while people are naturally able to self-reflect, the capability must be developed to reach full potential.

Deliberation

Ludden (2013) defined deliberation as engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and take action. Deliberation could also be considered a blending of critical thinking, reflection, and community; it requires the cognitive focus of critical thinking and reflection while being open to input and adjustment from outside sources.

Of course, one of the keys to this type of deliberation is clear communication. Clear communication is both a means and an end in establishing an ethical climate within an organization. Clear and truthful communication is foundational in creating trust. García-Marzá (2005) described the need for trust in the current business climate, "Nowadays, trust is without doubt one of the company's most important aspects" (p. 209). Trust is necessary in building relationships, and relationships are necessary to reach and operate at higher stages in moral reasoning.

Deliberation allows for amplification of wisdom by building on the relationship between the leader and the followers. Kohlberg and Hersh (1977) stated that relationships are the main venue through which individuals reach successively higher stages in moral reasoning. They revealed that the key difference between preconventional and conventional morality is the ability and desire to think about the needs and situations of other people. This focus on the needs of others is also a fundamental tenet of both transformational and servant leadership.

<div align="center">

Action

</div>

A wise person knows that decisions must be enacted to be wise (Ludden, 2013). The action stage in the model represents a construct of wisdom that separates it from mere thought or speculation. An explanation of the constructs involved in taking wise action follows.

Authenticity

Awareness precedes authenticity. Ludden (2013) stated that authenticity is understanding the worldview, values, ethics, and morals of oneself and others and then acting in accordance with that understanding. The order here is important; awareness and

understanding precede action. A person must know what he or she believes before being able to act authentically. Kouzes and Posner (2007) stated that an authentic person, particularly a leader, must find their voice. In order to connect *say* and *do*, the motivations must be intrinsic: "If the words you speak are not your words but someone else's, you will not, in the long term, be able to be consistent in word and deed" (p. 49).

The first step in finding this authentic voice is to reconcile personal values and beliefs and then pursue those values accordingly. Drucker (2005) called this analysis the mirror test: "[Ask], what kind of person do I want to see in the morning?" (p. 105). Determining the answer to this question is not a one-time process; determining personal integrity requires continual reflection. Once personal integrity has been determined, the boundaries have been set, and acting within that set of values determines personal authenticity.

In addition to acting with a clear conscience, authenticity also serves a functional purpose for a leader. Kouzes and Posner (2007) stated that building a cohesive and collaborative team starts with trust as a framework. They asked more than 75,000 people from around the world what they admired most in a leader, and *honesty* was the top response from every itineration of the survey. Followers, peers, collaborators, or subordinates, the exact relationship between leader and nonleaders does not appear to matter; trust and honesty are vital in building a working relationship. Personal authenticity is obviously fundamental in this process.

Courage

The courage in the WBLM is not the bravery of a soldier on a battlefield; wisdom requires moral courage. Moral courage compels a person to do what is right, despite the

risks (Chapa & Stringer, 2013). Of course, the premise of this courage is that the leader knows what is right. A courageous leader is committed to core values that include the greater good, understanding the big picture, and willingness to sacrifice for long-term goals (Hays, 2007).

Hays (2007) noted that organizational wisdom required the courage to sometimes oppose business logic: "It may also mean thinking and acting in unconventional ways, which may open one up to criticism or other attack. The wise individual wears this vulnerability well" (p. 79). Ludden (2013) stated that courage is having the fortitude to do what is right irrespective of opposition or chances of failure.

Collaboration

Collaboration is essential to leadership wisdom because of the nature of organizations. Duncan and Weiss (1979) explained that coordinated purposeful activity is what distinguishes organizations from other types of collective behavior. They noted that crowds do not constitute an organization, and a purpose alone is also insufficient. Organizations require people working together toward a common goal. It is incumbent upon a wise leader to facilitate this collaboration.

The underlying goal for any leader is organizational effectiveness: "The most fundamental concept of effectiveness must be the degree to which firm or organizational actions lead to the outcomes intended" (Duncan & Weiss, 1979, p. 81). Ludden (2013) defined collaboration as acting within the context of one's meaning and/or purpose in life in a way that enables others to do the same while striving together to achieve the purpose of the organization. Seeing the connections between collaboration and organizational

effectiveness is not difficult. Both definitions have a relational construct; both involve people working together.

Fortunately for leaders, people are naturally inclined to form relationships. Ashford and Black (1996) noted that work relationships are associated with higher job satisfaction. They stated, "Relationships give meaning to situations" (p. 203). Weick and Ashford (2000) explained that learning is an important by-product of social interaction at work. People are happier and more knowledgeable when they are working together toward a common goal. Staudinger and Baltes (1996) noted that wisdom is generated and nurtured through an interactive process.

Spirituality

Spirituality surrounds and encompasses the WBLM. Kallio (2015) noted that spirituality and the study of wisdom have cross-connections. A leader's spirituality serves as the cornerstone for his or her worldview. Sire (2004) described worldview, "Worldview is the fundamental perspective from which one addresses every issue of life" (p. 24). Sire pointed out that everyone has a worldview; he calls it a "fundamental orientation of the heart," and "the foundation on which we live" (p. 161).

The concept that worldview is an individually defined system of meanings is similar to symbolic interaction theory. Symbolic interactionism posits that meanings are subjective and that people negotiate meanings based on experiences and relationships (Brinkerhoff, White, Ortega, & Weitz, 2008). Moreover, as part of this negotiation, other people's meanings are critically examined before being adopted. These sets of meanings that develop are a primary part of an individual's worldview.

Sire (2004) presented the uncomfortable truth that even when people have a conscious, considered, deliberate worldview, they can still be wrong. This uncertainty is primarily because the available evidence is limited. Descartes (1637) stated that even when the evidence is exhausted action is still required: "When it is not in our power to determine what is true, we ought to act according to what is most probable" (p. 12). When the truth is uncertain and a decision must be made, then faith must become part of the equation; faith, not necessarily in the sense of God, but faith as the evidence of things unseen.

This faith, this spirituality, this dedication to a higher power allows a wise leader to adhere to a difficult moral standard. Spirituality as a basis for a leader's worldview grants the moral courage to make a difficult, dangerous, unpopular decision. Ciulla (2005) noted that the expectation that leaders' motives are altruistic is unnatural. Only through an external motivation is a leader able to be altruistic. Ludden (2013) defined the spiritual component of wisdom: It seeks wisdom from a higher power or being and involves continuous spiritual growth and formation that is planned and intentional as a person acquires and refines his or her wisdom.

Wisdom and Business Leadership

Bass and Bass (2008) listed wisdom as one of the virtues of leadership. Kessler and Bailey (2007b) noted, "There is perhaps nothing more important for orienting and conducting human affairs than wisdom" (p. xvii). A variety of literature clearly stated that wisdom is necessary for effective leadership (Bennis, 2004; Dunham, 2010; Holliday et al., 2007; Jones, 2005; Küpers & Statler, 2008; McKenna et al., 2009; Moberg, 2008; Sternberg, 2007b). Callahan (2009) listed wisdom as one of the most important virtues a

leader can possess. Sternberg (2003) stated that wisdom is the most important quality a leader can have, but he also said it is the rarest of qualities. In a study of military noncommissioned officers, Zacher, McKenna, Rooney, and Gold (2015) found that high wisdom scores were less common than low scores. They explained that because wisdom represents an ideal that is difficult to achieve, the results that relatively few officers scored highly on the wisdom scale was unsurprising. However, Zacher et al. also stated that lower scores should not be considered a negative reflection on those participants' ability to lead satisfactorily; rather, those who scored highly possessed exceptional insights in exceptionally difficult or ambiguous situations.

Küpers (2007) noted that wisdom is becoming increasingly important for dealing with the challenges of current business contexts. Kaipa (2014) explained that the change of pace today is faster than ever, and the business environment is becoming increasingly complex. Examples of foolish leadership are still depressingly prevalent. Dotlich and Cairo (2003) listed 11 characteristics that are barriers to executives acting wisely: (a) arrogance—the leader being right and everyone else wrong; (b) melodrama—always grabbing the center of attention; (c) volatility—having sudden and unpredictable mood shifts; (d) excessive caution—having difficulty making any decision; (e) habitual distrust—focusing on the negatives; (f) aloofness—being disengaged and disconnected; (g) mischievousness—believing rules are only suggestions; (h) eccentricity—being different for the sake of being different; (i) passive resistance—interpreting silence as agreement; (j) perfectionism—focusing on getting the little things right while the big things are ignored; and, (k) eagerness to please—wanting to win the popularity contest. Although CEOs and other top executives are almost always intelligent, experienced

people, the media illustrates a steady stream of epic failures, and the average tenure of CEOs in major companies is growing increasingly shorter: "In a very short period, CEOs have gone from 'most admired' status to 'least trusted'" (p. xvii). Organizational leaders must overcome these 11 characteristics to reestablish trust.

Ethical Wisdom

Wisdom has a key component that goes beyond ability, intelligence, knowledge, good advice, insight, or expertise. Wisdom requires ethical action. Sternberg (1998, 2003, 2004a, 2005a, 2005c, 2007b, 2008a, 2008b, 2009) alludes to it in his work on the balance theory of wisdom, the imbalance theory of foolishness, and WICS. All of these wisdom examples require consideration of others. In other words, they require ethical consideration. In fact, this ethical or moral component seems to be the missing factor in so many modern leaders. Fischer (2015) argued that wisdom is "understood as knowledge of the fundamental truths in the domain of living well—and orienting knowledge about what is good and right" (, p. 73). The literature does not call for leaders who are smarter or who went to better schools. The literature shows a need for leaders who act ethically (i.e., who act wisely).

Jones (2005) noted that developing an organizational culture of wisdom discourages unethical, questionable, or illegal behavior. Küpers (2007) argued that unwise business decisions have led to unethical and illegal actions and eventually to corporate scandals and frauds on an unprecedented scale (e.g., Enron, Parmalat, ABB). Provis (2010) associated wisdom with the ability to make ethical decisions in business. Yang (2011) pointed to recent events (e.g., credit crunch, bank failures, global financial and environmental crises) as the harmful effects of leaders' lack of wisdom. Sternberg

(2007a) summarized this lack of wisdom: "We have seen in failed leaders the enormous costs of having leaders who are knowledgeable and intelligent—who have 'good degrees' from prestigious schools—yet who are unwise" (p. 26). The rate of corruption litigation in the last decade illustrates that the costs of foolishness have only increased since Sternberg explained the consequences for the lack of wisdom.

Ferrari, Weststrate, and Petro (2013) suggested that wisdom can be gained by observing these narratives. They noted that individuals can glean wisdom from the lived experiences of memorable people. Of note, Ferrari et al. presented narrative simulation in the positive, suggesting the emulation of wise narratives, not the avoidance of the negative stories. Unfortunately, negative narratives seem to be far more prevalent in recent times.

Leadership examples. As a recent example, Volkswagen (2016) is still determining how to recover its image, and customer trust, after it was revealed that it had conspired to install software that reduced the effectiveness of emission control systems in its clean diesel engines. This software allowed Volkswagen to achieve artificially good ratings from EPA, ratings that were not reflected in the vehicles sold to the public. While some short-term sales boost from the deception may have occurred, the action by Volkswagen was without doubt deceptive. Volkswagen announced a settlement agreement of over $10 billion to compensate customers.

In March 2016, Olympus Corp of the Americas entered into a $646 million three-year deferred prosecution agreement that will allow it to avoid prosecution for paying bribes and kickbacks (U. S. Department of Justice, 2016). Among the requirements of

Olympus' agreement is the adoption of several new compliance measures and the annual certification by the CEO and board of directors that the program is effective.

Useem (2016) compared the Volkswagen deception to the Ford Pinto: "Ford's president, Lee Iacocca, had wanted a car weighing no more than 2,000 pounds and costing no more than $2,000 to be ready for production in 25 months" (p. 6). When the Pinto showed a predilection for exploding when struck from behind, the pressure from the Ford leadership did not allow for a recall to be a serious consideration. In fact, the recall review team decided twice that recalls were unnecessary.

Andrew Fastow, former Enron CFO, recently gave a presentation in Houston. He showed the audience a trophy he was given in 2000 for being CFO of the year, and he showed the audience his prison ID card: "I got both of these things for doing the same deals" (Shilcutt, 2015, p. 6). These disparate results for the same actions are representative of the lack of wisdom in leadership. Enron is by no means an isolated example. The corporate purpose of many companies often seems to have no ethical basis. Kilburg (2006) noted, "The values of the leader and those with whom the executive interacts can provide fertile ground for the derailment of wisdom" (p. 128).

Purpose

The literature illustrates the following: Wise leaders have a purpose. They have a spiritual focus. They have an awareness of their community, their constituents, and their goals. They are working toward a common good. This purpose is both why wise leaders are needed and why they are desired. People require a purpose. If they do not have a purpose, they create one. Simmel (1978) observed how people treat money:

> Never has an object that owes its value exclusively to its quality as a means … so thoroughly and unreservedly developed into a psychological value absolute, into a completely engrossing final purpose governing our practical consciousness.…
>
> The inner polarity of the essence of money lies in its being the absolute means and thereby becoming psychologically the absolute purpose for most people. (p. 232)

Money is a tool, a means to an end, and it has become an end unto itself. This usage is contrary to money's original purpose. Many people, without an alternate purpose, turn to money as the absolute purpose for their lives.

Bill Cook, founder of the world's largest privately held medical device manufacturer, noted the dangers when a company failed to meet sales projections, even if it was a profitable year:

> I can think of any number of public-company managers who have done some very strange things with their product problems.…Sometimes they don't investigate or report the problem properly or, worse, they might even try to cover it up. As a private company the only master you have to serve is the customer. (Hammel, 2008, p. 210)

That observation allowed Cook Medical to follow its leader's purpose of putting the patient first.

Staudinger and Gluck (2011) explained that wise people tend to show concern for others: "In addition to being able to being cognitively able to see others' perspectives, they transcend their self-interests and care deeply for the well-being of others" (p. 218).

They explained that this attitude extends beyond a wise person's family and friends and leads them to engage in civic activities for the benefit of others.

The objectification of money is a perfect summary of the need for wisdom in leaders. Society requires business leaders with the wisdom to consider the common good a worthy goal, and the ability to lead and inspire others toward that common good. In the examples given in this chapter of foolish leadership (Enron, Volkswagen, Olympus Corp, Ford), the leaders were not acting for the common good. The leadership goals were profitability and market share. The essential purpose behind these leadership decisions was greed, not wisdom. Schwartz and Sharpe (2010) noted that the diagnoses of these organizational failures are all too often attributed to greed, gain, and glory. They explained that rules and regulations can help limit the extent of the damage these people can cause, but the solution to the problem is practical wisdom.

CHAPTER THREE—METHOD

As evidenced by the literature in Chapter Two, wisdom is rare, inconsistently defined, yet a vital leadership characteristic. This study followed the work done by Livingston (2012) and Peterson (2016) and examined organizational leaders' perceptions of wisdom. This chapter describes the problem statement and hypotheses. Then, after a brief review of the literature, the methodology is described, including participant selection, instrumentation, data collection procedures, research design and analysis, reliability and validity, and delimitations.

Problem Statement

Krathwohl and Smith (2005) explained that the purpose of the method section is to translate the problem statement into research procedures. While wisdom is strongly supported in the literature as a positive attribute for a leader to have (Küpers, 2007; McKenna et al., 2009; Yang, 2011; Zacher, Pearce, Rooney, & McKenna, 2014), it is still not entirely clear how wisdom is gained or if leaders are actively seeking to increase their wisdom (Dotlich & Cairo, 2003; Freed, 2011; Kaipa, 2014).

Ludden (2009, 2015) suggested the WBLM as a dynamic process a leader uses to apply knowledge, experience, and virtue in seeking truth that subsequently governs the leader's actions and decisions. The WBLM can be operationalized for leader development because it brings together acquired knowledge systems, assessment of decisions processes, and leadership responsibilities. Leaders who seek to increase their wisdom

need operational models and tools drawn from academic research. This study examines the WBLM as a wisdom development tool.

Hypotheses

Leedy and Ormrod (2010) stated, "Hypotheses are intelligent, tentative guesses about how the research problem may be resolved" (p. 56). The current study built on the research done by Livingston (2012) with executive coaches and by Peterson (2016) with Christian college presidents. This study further tested the WBLM proposed by Ludden (2009, 2015) and the perception of wisdom by organizational leaders.

The research hypotheses for this study were based on Ludden's (2009) definition of wisdom:

> Wisdom is a dynamic process a leader uses to apply knowledge, experience, and
> virtue to seek truth that subsequently governs the leader's actions and decisions
> for the organization. Wisdom engages a person's cognitive, affective, and
> conative abilities for personal, interpersonal, community, societal, and global
> improvement. Wisdom is manifested by continuously seeking more knowledge,
> experience, and virtuosity to achieve these ends. (p. 1)

Ludden's (2015) WBLM is built on the ten constructs reflected in his definition of wisdom. This study sought to measure leaders' perception of wisdom and agreement to the WBLM by testing the following hypotheses:

- H_{A1}: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

- H_{01}: There will not be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

- H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality— describe wisdom in organizational leaders.

- H_{02}: There will not be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

- H_{A3}: Organizational leaders will agree that they perceive developing wisdom in leaders is important.

- H_{03}: Organizational leaders will not agree that they perceive developing wisdom in leaders is important.

Review of Literature for Proposed Methodology

The research was conducted using a mixed-methods approach. The questionnaire used a seven-point Likert scale to measure agreement with a construct of the WBLM (see Appendix A). If the participant disagreed with a wisdom construct, they were presented with an open-ended question asking what they would change about the construct that would allow them to strongly agree. Bryman (2008) noted, "The quantitative and the qualitative data deriving from mixed methods research should be mutually illuminating" (p. 603). This mixed-methods approach allowed the researcher to gather statistically

quantifiable data and also gain a deeper understanding of the areas where participant's perceptions of wisdom differed from the WBLM. By including the qualitative questions when leaders exhibited a lack of agreement to the model, more insight into why they disagreed could be obtained. This additional insight could prove useful in revising or clarifying the WBLM for the future.

The study questionnaire was adapted from the work done by Livingston (2012) and by Peterson (2016) with the goal of extending the leadership wisdom research (see Appendix A). Each of these previous studies focused on a specific demographic segment, executive coaches and Christian college presidents, respectively. The current research investigated organizational leaders' perceptions of wisdom as expressed by the WBLM. These leaders were all within the same organization, but they operated in varied industries and markets worldwide.

The WBLM was built on ten constructs of wisdom (Ludden, 2009, 2015). The work by Ludden (2015), Livingston (2012), and Peterson (2016) used these constructs as a basis for identifying the perceptions of wisdom by leaders in different fields. Following, these constructs are summarized through the research of Ludden (2009, 2015) and others.

1. Knowledge is acquired in formal and non-formal learning environments and balanced with knowledge about the organization (Baltes & Staudinger, 2000; Ludden, 2015; Meacham, 1990).

2. Experience is acquired through interaction with things, activities, media, events, organizations, institutions, and society (Ardelt, 2004b; Ludden, 2015; Yang, 2014).

3.   Community contributes to wisdom by connecting the individual with ideas, thoughts, values, morals, and knowledge from family, friends, peers, civic groups, religious groups, and culture (Bangen et al., 2013; Dunham, 2010; Ludden, 2015).

4.   Critical thinking uses the process of applying logic and reason to ideas, problems, and solutions (Howard et al., 2014; Ludden, 2015; Scriven & Paul, 1987).

5.   Reflection is the process of sense making of a person's interaction with the world around him or her through thoughtful consideration (Bandura, 2003; Ludden, 2015; Raelin, 2002).

6.   Deliberation is the process of engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and prepare for implementing action (Kohlberg & Hersh, 1977; Ludden, 2015).

7.   Authenticity incorporates the worldview, values, ethics, and morals that are an essential part of one's self, being transparent about one's essential core and acting in a manner consistent with these essentials (Drucker, 2005; Kouzes & Posner, 2007; Ludden, 2015).

8.   Courage is the fortitude to carry out those actions and decisions one knows to be right despite opposition or potential for failure (Chapa & Stringer, 2013; Hays, 2007; Ludden, 2015).

9.   Collaboration involves acting within the context of one's meaning or purpose in life in a way that enables others to do the same while striving together to achieve the purpose of the organization (Duncan & Weiss, 1979; Ludden, 2015; Staudinger & Baltes, 1996).

10. Spirituality conveys the need for leader humility and a continual seeking for growth, recognizing a higher power or purpose that is more important than oneself (Ciulla, 2005; Kallio, 2015; Ludden, 2015; Sire, 2004).

Studies with Similar Methods

Livingston (2012) used a web-based questionnaire and a mixed-methods approach to measure the perceptions of wisdom by executive coaches. Livingston's participant population was identified through Coach-Source, a virtual coaching firm with 779 independent executive coaches. Livingston received 184 completed questionnaires (out of 779), giving him a response rate of 25.41%.

Peterson (2016) used a modification of Livingston's (2012) questionnaire to conduct a web-based, mixed-methods survey of Christian college presidents. The total number of presidents invited to participate was 119. Peterson received 53 completed surveys for a response rate of 46%.

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Rationale for Participant Selection

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This study took a census of all leaders within the participant organization, which was a global privately held company headquartered in Midwestern United States. This organization had interests in diverse business fields. It had offices in 14 countries and did business in 135. The leadership population in this instance was defined as individuals who had managerial authority and responsibility. The application of this leadership definition resulted in a list of 1,043 individuals who either have direct responsibility for others, executive responsibility, or both. A census was conducted, seeking information from every individual in the population (Bryman, 2008; Fowler, 2009). Fowler (2009) explained that no sampling is involved in a census.

An email from HR was sent the week prior to the survey invitation that explained the intent of the survey. This initial email prepared leaders to receive the survey and reassured them that it was not an officially mandated survey. Leaders globally were invited to participate, but the survey was not translated into other languages. All leaders within the organization had access to a computer, and they all had an organizational email address to which the invitation was sent.

Instrumentation

The survey instrument was based on the WBLM (Ludden, 2015). Ludden (2009) developed the WBLM to represent the dynamic process of wise leadership. This dynamic process has ten constructs: knowledge, experience, community, critical thinking, reflection, deliberation, integrity, courage, collaboration, and spirituality. The survey instrument used a Likert scale to measure leader agreement with these 10 constructs, gauging their perceptions of wisdom development in organizational leaders. Bradburn, Sudman, and Wansink (2004) noted that the Likert scale is the most popular scaling technique. Bradburn et al. (2004) explained that by asking participants to agree or disagree with a sample of propositions, the answers can be combined to get a better understanding of their perception.

In their work on wisdom perception, Livingston (2012) and Peterson (2016) each used a WBLM-based questionnaire with questions that were slightly modified to relate to their research populations. This study followed the same model. For each of the 10 constructs of wisdom-based leadership, the participants were given two statements about wisdom as it relates to organizational leadership (e.g., As it pertains to developing wisdom in organizational leaders; Knowledge is acquired in formal and non-formal

learning environments and is balanced with knowledge about the organization). They were then asked to rate their agreement with this statement on a seven-point Likert scale. The scale ranges from *Strongly Disagree* to *Strongly Agree*; this scale allowed the data to be considered interval data for statistical analysis (Keller, 2006). Bryman (2008) explained that a Likert-type scale is useful for measuring the intensity of participants' feelings.

This questionnaire also contained skip logic. Depending on how participants answered questions, they were taken to the appropriate point in the questionnaire. For example, if the participant answered *Neither Agree or Disagree* or above on the Likert scale, then he or she continued to the next quantitative Likert scale question. If a participant answered *Somewhat Disagree* or less, then he or she was directed to an open-ended qualitative question. Bradburn et al. (2004) explained that open-ended questions that do not restrict participants to prescribed categories can uncover uncommon but intelligent opinions. After answering the qualitative question, the participant was taken back to the next quantitative Likert scale question. Fowler (2009) warned that open-ended questions are not generally well suited to self-administered questionnaires; however, offering the open-ended questions to allow participants to explain their disagreement established consistent question objectives and still allowed for answer comparison.

Procedures for Data Collection

The use of an internet survey tool, SurveyMonkey, offered several advantages to data collection. Fowler (2009) explained that with internet surveys the unit cost of data collection is low. They have potential for high speed of returns, and internet surveys

provide participants time for thoughtful answers. Bryman (2008) noted that internet surveys are more economical, can reach large numbers of participants, and are not constrained by location. These are notable benefits to the collection of data from this population. The ability for these busy leaders to answer the questions at their convenience may have been a significant factor in response rate. In addition, the ability to reach leaders easily regardless of their location allowed the population to include global leaders instead of limiting the population to one country or region.

Many of the disadvantages of internet data collection (Bryman, 2008) are alleviated by the target population of this study. All of the leaders had internet access, and they all had a computer provided by the organization. All of the participants had the necessary skills and knowledge to use their computers to respond to the questionnaire.

After approval of the research design by the dissertation committee and the Institutional Review Board, an email was sent by HR explaining the purpose of this study and encouraging leader participation. This type of study was previously impossible in this organization but was welcomed due to recent organizational changes. Because leaders within this organization have not been invited to participate in other organizational surveys, one of Bryman's (2008) internet survey disadvantages was alleviated, the invitation to participate was not viewed as another nuisance email., Because the introductory email was sent by HR, and by a global functional leader with name recognition, it was not easily ignored.

To address another of Bryman's (2008) chief disadvantages with electronic data collection, concerns about confidentiality, the data were gathered through SurveyMonkey. SurveyMonkey is a well-established survey provider with robust data

security and privacy protocols. Surveys through SurveyMonkey are automatically SSL

encrypted. SurveyMonkey also removed all personal identifying information, including

IP addresses, from surveys before sending the data to the researcher.

A link to the questionnaire was sent the week following the HR introduction

email. As suggested by Leedy and Ormrod (2010), the email containing the link also

introduced the researcher, Indiana Wesleyan University, and the purpose of the study.

This email also clearly stated that the invitees were under no obligation to participate, and

no harm would come to them if they did not participate. It explained that if they chose to

participate their responses would remain anonymous. This information prior to

participation in the survey served to ensure the participants were fully informed (Fowler,

2009).

<div align="center">**Research Design and Analysis**</div>

At the close of the survey, the data were retrieved from SurveyMonkey. The

quantitative data were then entered into SPSS (IBM SPSS Statistics, Version 24) for

analysis. Bryman (2008) noted that SPSS has been in existence since the mid-1960s and

is probably the most used computer software for statistical analysis in the social sciences.

Leedy and Ormrod (2010) recommended the use of software such as SPSS, noting that it

offers several advantages such as a broader range of available statistics, faster calculation,

and the ability to display results graphically.

To align this research with the methodology used by Livingston (2012) and

Peterson (2016), descriptive statistics were used to analyze the data. The mean score,

median score, variance, and standard deviation of responses were calculated. Like

Livingston (2012) and Peterson (2016), this study also used a factor analysis for the

purpose of variable identification and Spearman *rho* correlation coefficients between variables based on the nonparametric skew of the data (Groebner, Shannon, Fry, & Smith, 2011).

The qualitative data gathered from the open-ended questions were coded to find common themes. Leedy and Ormrod (2010) explained that in qualitative research, the researcher begins with a large body of data and must boil it down through inductive reasoning, gradually sorting and categorizing the data until themes emerge. This study used QDA Miner (Version 2.0.1; Provalis, 2016) to assist with the coding of the qualitative data. QDA Miner is software designed to help researchers determine patterns and identify themes in qualitative data.

Reliability and Validity

Bryman (2008) explained that reliability is the consistency of a measure of a concept. Bryman's explanation of reliability involved three components: stability, internal reliability, and inter-observer consistency. Bryman noted that stability is very difficult to evaluate, stating that there is no clear solution as to how to disentangle a possible lack of stability in the study from possible real changes among the participants. According to Bryman (2008), most researchers measure internal reliability via Cronbach's alpha. Ludden (2015) conducted two research studies to develop the WBLM instrument. Both studies demonstrated a very strong inter-item reliability using Cronbach's alpha ($\alpha > .9$). Bryman's (2008) third construct of reliability, inter-observer consistency, is not likely to be a significant factor in this study. The only area where reliability seemed to be a possible concern was in the coding of the open-ended

responses. QDA Miner (Version 2.0.1; Provalis, 2016) helped to ensure the consistency of the coding.

Leedy and Ormrod (2010) stated, "The validity of a measurement instrument is the extent to which the instrument measures what it is intended to measure" (p. 28). Fowler (2009) noted, "The idea of validity for subjective measures cannot be observed directly, but is instead inferred from studies of how answers are related to other similar studies" (p. 16). The WBLM has now been used as the basis for several studies: Ludden (2015), Livingston (2012), and Peterson (2016). It has been demonstrated to be both reliable and valid.

Delimitations

It is vital to know what the research intends to study; however, it is equally important to know the limits of the research (Leedy & Ormrod, 2010). This study was focused specifically on the perceptions of wisdom by leaders within this single, global organization. Although the leaders work in diverse industries and regions, they are all part of the same organization. Therefore, the potential to generalize the results of this research to those working in other organizations is limited.

<div align="center">

Method Conclusion

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Replication, or at least the potential for replication, is a key component of the scientific method. Subsequently, Bryman (2008) made the obvious point: "If a researcher does not spell out his or her procedures in great detail, replication is impossible" (p. 32). The adaptation of the questionnaire used by Livingston (2012) and Peterson (2016) for the study of organizational leaders was a replication within a different population. The

intent of this section was to illustrate the methods used in this study so that others may

further this research into other populations.

CHAPTER FOUR—RESULTS

This chapter is organized into two parts. Part one describes the demographics of the study participants in order to provide context regarding their perceptions of wisdom. Part two provides the results and discussion of the inferential statistics and addresses the following three research hypotheses:

- H_{A1}: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

- H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

- H_{A3}: Organizational leaders will agree that they perceive developing wisdom in leaders is important.

Demographic Description of the Sample: Descriptive Statistics

This section describes the demographics of the participants for the purpose of presenting a context for their responses to the survey descriptions. The population for this study included 1,043 leaders from within a single global organization. The term *leader* was defined as managerial authority and responsibility (Kilburg, 2006). An email list was generated that included all leaders within the organization who met this definition of leadership (n=1,043). An email from HR was sent on Friday, February 17, 2017 to all leaders, introducing the researcher and the project (see Appendix B). An invitation containing a link to the SurveyMonkey survey on Monday, February 20, 2017

(see Appendix C). Of the 1,043 invitations sent, four were ultimately undeliverable, thus reducing the research population to 1,039.

As of Friday, March 3, 2017, 291 surveys were completed. A reminder email was sent to the entire population, thanking those who had responded and asking those who had not to consider participating (see Appendix D). The survey closed on the morning of March 7, 2017. The total number of respondents was 441 or 42.44%. The number of completed surveys was 375 or 36%. The raw data were exported from SurveyMonkey as an Excel (Microsoft Excel, Version 2010) spreadsheet. The data were then opened and analyzed using SPSS (IBM SPSS Statistics, Version 24) for the quantitative responses and coded using QDA Miner (Version 2.0.1; Provalis, 2016) for the qualitative comments.

Before beginning the survey, participants were first required to agree with several statements to ensure that Institutional Review Board requirements were fulfilled to protect participants. These statements can be found in Appendix A. Four hundred and forty respondents agreed to these statements. One respondent disagreed and was automatically disqualified from continuing the survey.

Participant Gender

One hundred and forty-two females and 230 males completed the survey as shown in Table 1. Three participants chose not to identify their gender.

Table 1

Respondent Gender Frequency Distribution

Gender		Frequency	%	Cumulative %
Valid	Female	142	37.9	37.9
	Male	230	61.3	99.2
	Prefer not to answer	3	0.8	100.0
	Total	375	100.0	

Participant Education Level

In terms of highest education level achieved by the survey participants, 79.7% had a bachelor's degree or above. Twenty-eight participants (7.5%) had a professional or doctoral degree. Table 2 shows the highest level of education frequency distribution.

Table 2

Highest Level of Education Frequency Distribution

Education Level		Frequency	%	Valid %	Cumulative%
Valid	Associate degree	23	6.1	6.2	6.2
	Bachelor's degree	161	42.9	43.2	49.3
	Doctorate (PhD, EdD, etc.)	18	4.8	4.8	54.2
	Less than a bachelor's degree	51	13.6	13.7	67.8
	Master's degree	110	29.3	29.5	97.3
	Professional degree (MD, JD, OD, etc.)	10	2.7	2.7	100.0
	Total	373	99.5	100.0	
Missing	Declined to answer	2	.5		
Total		375	100.0		

Country of Citizenship

Participants were asked to indicate their country of citizenship. As expected, given the United States headquarters for this organization, the majority of participants were from the USA (n=218, 59.1%). The other countries most represented were

Australia (8.4%), Ireland (7.6%), and Denmark (6.5%). Six participants (1.6%) did not

answer this question and were not included in these percentage calculations. Table 3

provides a comparison.

Table 3

Frequency Distribution of Organizational Leader Country of Citizenship

Citizenship Country		Frequency	%	Cumulative %
Valid	No Response	6	1.6	1.6
	Australia	31	8.3	9.9
	British/Australian	2	.5	10.4
	Canada	3	.8	11.2
	Chile	1	.3	11.5
	Costa Rica	1	.3	11.7
	Denmark	24	6.4	18.1
	Finland	1	.3	18.4
	Germany	2	.5	18.9
	India	4	1.1	20.0
	Ireland	28	7.5	27.5
	Italy	6	1.6	29.1
	Japan	16	4.3	33.3
	Korea	7	1.9	35.2
	Mexico	1	.3	35.5
	Netherlands	4	1.1	36.5
	Norway	1	.3	36.8
	Spain	1	.3	37.1
	Sweden	1	.3	37.3
	Taiwan	5	1.3	38.7
	United Kingdom	12	3.2	41.9
	USA	218	58.1	100.0
	Total	375	100.0	

Business Demographics of Organizational Leaders

The participants in the study were all leaders in businesses within a single global

organization. To gain a fuller perspective of their wisdom perceptions, information was

collected that included (a) organizational role, (b) country of employment, and (c)

business entity type in which he or she leads.

Participant Role in Organization

The frequency distribution of leadership levels can be seen in Table 4.

Table 4

Organizational Role Frequency Distribution

Role	Frequency	%	Cumulative %
Declined to answer	1	.3	.3
Team Lead/Supervisor	54	14.4	92.3
Manager	221	58.9	77.9
Director	70	18.7	18.9
VP & above	29	7.7	100.0
Total	375	100.0	

Country of Employment

When the participants were asked to identify their country of employment, they listed 22 different regions and countries. Some of these leaders have responsibility for large areas, which necessitates traveling to, and working in, several different countries. No one responded "global." Given that 29 participants were vice presidents and above, the assumption can be made that some of them have global responsibilities. This question appears to have been interpreted by some participants as asking for area of responsibility and by some as asking for their primary work location. Regardless of interpretation of the question, this data establishes a global framework for the study. A frequency distribution can be seen in Table 5.

Table 5

Employment Country Frequency Distribution

Employment Country		Frequency	%	Valid %	Cumulative %
Valid	Australia	33	8.8	8.9	8.9
	Canada	1	.3	.3	9.2
	Chile	1	.3	.3	9.5
	Denmark	24	6.4	6.5	15.9
	Germany	1	.3	.3	16.2
	India	3	.8	.8	17.0
	Ireland	31	8.3	8.4	25.4
	Italy	4	1.1	1.1	26.5
	Japan	17	4.5	4.6	31.1
	Korea	8	2.1	2.2	33.2
	Netherlands	1	.3	.3	33.5
	Norway	1	.3	.3	33.8
	Taiwan	5	1.3	1.4	35.1
	United Kingdom	6	1.6	1.6	36.8
	USA	223	59.5	60.3	97.0
	Western Europe	1	.3	.3	97.3
	Europe, Middle East, & Africa - EMEA	5	1.3	1.4	98.6
	Finland, Sweden, Denmark, Norway, Iceland	1	.3	.3	98.9
	Netherlands and Belgium	1	.3	.3	99.2
	Southern Europe	1	.3	.3	99.5
	UK—Europe responsibility	1	.3	.3	99.7
	United Arab Emirates	1	.3	.3	100.0
	Total	370	98.7	100.0	
Missing	Missing	5	1.3		
Total		375	100.0		

Business Entity Type

The parent organization for which all of the participants work has varied business

interests. The participants were asked to identify their primary business industry. The

business type frequency distribution can be seen in Table 6.

Table 6

Business Type Frequency Distribution

Business Type		Frequency	%	Valid %	Cumulative %
Valid	Financial services	4	1.1	1.1	1.1
	Hospitality (hotel, casino, travel)	14	3.7	3.7	4.8
	Medical manufacturing (Devices, Pharma, Biomedical, etc.)	320	85.3	85.6	90.4
	Other (Aviation, Clinic, etc.)	14	3.7	3.7	94.1
	Raw material manufacturing	7	1.9	1.9	96.0
	Research	15	4.0	4.0	100.0
	Total	374	99.7	100.0	
Missing	No Answer	1	.3		
Total		375	100.0		

How the participant industry distribution related to the organization's distribution of leaders by industry was difficult to determine from the response data. However, because the entire leadership population was invited to participate, the response rate per industry is less important than the variety of industries represented.

Tests of Hypotheses: Inferential Statistics

Statistical analyses were conducted for the three research hypotheses. Tests of normality showed that for hypothesis one and hypothesis three, all of the responses to the constructs of the WBLM were not normally distributed. According to Groebner et al. (2011), a linear regression such as Pearson r assumes a bivariate normal distribution, and analysis of variance (ANOVA) assumes that all populations are normally distributed. The nonnormal distribution of the research data required that nonparametric inferential statistics be used in this study. Nonparametric statistical procedures were designed for situations where the data were highly skewed (Groebner et al., 2011). Hypothesis

number two required correlations and factor analysis to determine if wisdom in organizational leaders is described by the 10 constructs of the WBLM: knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality.

Each of the WBLM's 10 description constructs was tested using a Kolmogorov–Smirnov test of normality. Data from each construct were shown to be nonparametric (<.05). A summary of the normality testing can be found in Appendix E. The nonparametric skew to the data indicated that the leaders agreed with each construct description provided.

If a leader disagreed with the construct description, indicated by a Likert score of *Somewhat Disagree* or lower, then he or she was prompted to explain how the description should be modified to receive his or her strong agreement. The qualitative data gathered through these supplemental follow-up questions are presented as exact quotations in the appendices. Comments regarding the descriptions of wisdom are found in Appendix F; comments suggesting what should be added to the WBLM are in Appendix G; and, comments pertaining to wisdom as an outcome of leadership are in Appendix H. Incomplete or incomprehensible comments were not included in the appendices. In addition, comments that named the organization or organizational leaders were adjusted to maintain confidentiality. These changes are identified by brackets.

Leaders' Perceptions of WBLM Constructs

The first null hypothesis and hypothesis were tested against participant responses:

H$_{01}$: There will not be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

H$_{A1}$: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

Descriptive statistics for leaders' perceptions of the WBLM constructs. To begin the investigation into the H$_{A1}$ hypothesis, individual analysis was performed on each of the construct data sets. The quantitative response frequency distribution and mean response have been shown for the responses to each construct.

The quantitative survey data were gathered using a Likert scale as seen in Figure 2. The scale offers a continuum selection from *Strongly Disagree* on the far left to *Strongly Agree* on the far right. This seven-point scale did not display numbers.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
○	○	○	○	○	○	○
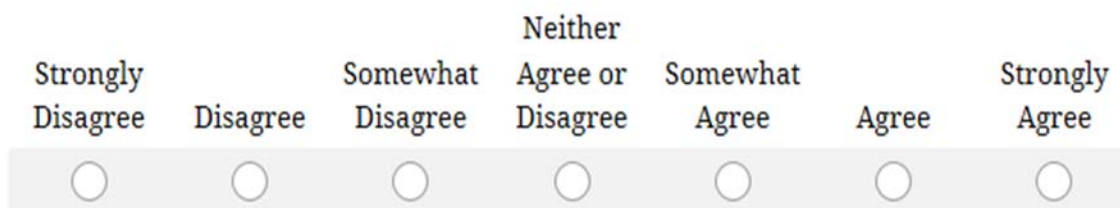
Figure 2. Likert response scale used in survey.

If the participant selected the midpoint (i.e., *Neither Agree or Disagree*) or higher on the scale, then he or she did not disagree with the construct and was given the next quantitative question. Any response below the midpoint was disagreement, and the participant was given a qualitative opportunity to explain what he or she would change about the construct to allow a choice of *Strongly Agree*. The combination of quantitative and qualitative data can provide a more complete understanding than either one alone

(Miles, Huberman, & Saldaña, 2014). The qualitative responses to each description were coded using QDA Miner (Version 2.0.1; Provalis, 2016). Bazeley (2013) suggested that short responses to self-completed questionnaires can be coded and categorized question-by-question, rather than coded along with the responses to the entire survey.

Knowledge description. The survey asked participants to rate their agreement as to whether the following description of knowledge expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Knowledge is acquired in formal and non-formal learning environments and is balanced with knowledge about the organization." Table 7 shows the frequency distribution of the responses to the knowledge description with 97.1% of the participants indicating agreement. The mean response score for the experience description was 6.02, indicating agreement.

Table 7

Knowledge Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Somewhat Disagree	1	.3	.5
	Neither Agree or Disagree	9	2.4	2.9
	Somewhat Agree	53	14.1	17.1
	Agree	226	60.3	77.3
	Strongly Agree	85	22.7	100.0
	Total	375	100.0	

Mean
6.02

Two participants disagreed with this knowledge description (0.5%), and both

provided comments as to how this description could be changed to allow them to choose

S*trongly Agree*. Both comments can be found in Appendix F.

Experience description. The survey asked participants to rate their agreement as

to whether the following description of experience expressed a concept that is essential to

the development of wisdom in organizational leaders: "As it pertains to developing

wisdom in organizational leaders; Experience is acquired through interaction with things,

activities, media, events, organizations, institutions, and society." Table 8 shows the

frequency distribution of the responses to the experience description with 94.9% of the

participants indicating agreement. The mean response score for the experience

description was 5.96.

Table 8

Experience Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	3	.8	1.1
	Somewhat Disagree	4	1.1	2.1
	Neither Agree or Disagree	11	2.9	5.1
	Somewhat Agree	62	16.5	21.6
	Agree	196	52.3	73.9
	Strongly Agree	98	26.1	100.0
	Total	375	100.0	

Mean
5.96

Eight leaders disagreed with the experience description (2.1%). All eight

participants provided more information as to how the description could be changed that

would allow them to choose *Strongly Agree*. Five of the comments indicated that the experience description should include interaction with people. The other three comments indicated that (a) experience comes from intentional interaction and mistakes, (b) it can come through work experience, and (c) wisdom is derived from more than experience.

Community description. The survey asked participants to rate their agreement as to whether the following description of community expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Community is ideas, thoughts, values, morals, and knowledge acquired from our family, friends, neighbors, fellow students, coworkers, civic groups, religious groups, and culture." The frequency distribution of responses to the community description can be seen in Table 9. The mean response was 5.76, with 89.6% of participants indicating agreement with the community description.

Table 9

Community Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	1	.3	.5
	Somewhat Disagree	4	1.1	1.6
	Neither Agree or Disagree	33	8.8	10.4
	Somewhat Agree	85	22.7	33.1
	Agree	170	45.3	78.4
	Strongly Agree	81	21.6	100.0
	Total	375	100.0	

Mean
5.76

Of the six leaders who disagreed with the community description (1.6%), five provided comments as to what changes would allow them to choose *Strongly Agree*. All five comments were unique and were unable to be categorized. These comments can be seen in Appendix F.

Critical thinking description. The survey asked participants to rate their agreement as to whether the following description of critical thinking expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Critical thinking is using cognitive skills that include remembering, understanding, applying, analyzing, synthesizing, evaluating, and creating." The frequency distribution of responses to the critical thinking description can be seen in Table 10. The mean response was 6.34, with 97.9% of participants indicating agreement with the critical thinking description.

Table 10

Critical Thinking Frequency Description and Mean

Response		Frequency	%	Cumulative %
Valid	Somewhat Disagree	1	.3	.3
	Neither Agree or Disagree	7	1.9	2.1
	Somewhat Agree	28	7.5	9.6
	Agree	167	44.5	54.1
	Strongly Agree	172	45.9	100.0
	Total	375	100.0	

Mean
6.34

Only one participant disagreed with the critical thinking description (.3%). The participant indicated that he or she would strongly agree with the description if the words *remembering*, *understanding*, *applying*, and *creating* were removed.

Reflection description. The survey asked participants to rate their agreement as to whether the following description of reflection expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Reflection is sensemaking of a person's interaction with things, activities, media, events, organizations, institutions, and society." The frequency distribution of responses to the reflection description can be seen in Table 11. The mean response was 5.90, with 92.5% of participants indicating agreement with the reflection description.

Table 11

Reflection Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	2	.5	.8
	Somewhat Disagree	3	.8	1.6
	Neither Agree or Disagree	22	5.9	7.5
	Somewhat Agree	63	16.8	24.3
	Agree	192	51.2	75.5
	Strongly Agree	92	24.5	100.0
	Total	375	100.0	

Mean
5.90

Six leaders disagreed with the reflection description (1.6%), and all six provided comments as to what changes would allow them to choose S*trongly Agree*. Two comments indicated disagreement with the word *sensemaking*. Two comments indicated the description should include reflection of one's interactions with others. One participant noted that reflection can be of others' actions, and one comment noted that reflection of the company history is important.

Deliberation description. The survey asked participants to rate their agreement as to whether the following description of deliberation expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Deliberation is engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and prepare for implementing action." The frequency distribution of responses to the deliberation description can be seen in Table 12. The mean response was 6.22, with 96.3% of participants indicating agreement with the deliberation description.

Table 12

Deliberation Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Somewhat Disagree	2	.5	.8
	Neither Agree or Disagree	11	2.9	3.7
	Somewhat Agree	36	9.6	13.3
	Agree	175	46.7	60.0
	Strongly Agree	150	40.0	100.0
	Total	375	100.0	

Mean
6.22

Three leaders disagreed with the deliberation description (0.8%), and all three provided comments as to what changes would allow them to choose *Strongly Agree*. One comment noted that engagement with others was not necessary for deliberation. Another participant commented that wisdom leads to deliberation. The third comment was a rephrasing of the description and can be found in Appendix F.

Authenticity description. The survey asked participants to rate their agreement as to whether the following description of authenticity expressed a concept that is

essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Authenticity is understanding the worldview, values, ethics, and morals that are an essential part of a person and acting in accordance with these integral elements of oneself." The frequency distribution of responses to the authenticity description can be seen in Table 13. The mean response was 5.84, with 88.3% of participants indicating agreement with the authenticity description.

Table 13

Authenticity Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	2	.5	.5
	Disagree	2	.5	1.1
	Somewhat Disagree	7	1.9	2.9
	Neither Agree or Disagree	33	8.8	11.7
	Somewhat Agree	66	17.6	29.3
	Agree	154	41.1	70.4
	Strongly Agree	111	29.6	100.0
	Total	375	100.0	

Mean
5.84

Eleven leaders disagreed with the authenticity description (2.9%), and 10 of them provided comments as to what changes would allow them to strongly agree. Three of the comments indicated that the participants did not see authenticity as essentially related to wisdom. Two comments noted the importance of considering the worldview of others. The remaining five comments all indicated ways to redefine the construct, but each definition was unique. All comments can be found in Appendix F.

Courage description. The survey asked participants to rate their agreement as to whether the following description of courage expressed a concept that is essential to the development of wisdom in organizational leaders: "As it pertains to developing wisdom in organizational leaders; Courage is fortitude to carry out those actions and decisions one knows to be right despite opposition or the potential for failure." The frequency distribution of responses to the courage description can be seen in Table 14. The mean response was 6.17, with 94.4% of participants indicating agreement with the courage description.

Table 14

Courage Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	2	.5	.5
	Disagree	1	.3	.8
	Neither Agree or Disagree	18	4.8	5.6
	Somewhat Agree	43	11.5	17.1
	Agree	155	41.3	58.4
	Strongly Agree	156	41.6	100.0
	Total	375	100.0	

Mean
6.17

Three leaders disagreed with the courage description (0.8%), and all three provided comments as to what changes would allow them to choose *Strongly Agree*. One participant disagreed with the relationship between wisdom and courage. Another participant noted that courage, to them, was a larger term than should be used in the context of business. The meaning of the third comment was unclear. All comments can be found in Appendix F.

Collaboration description. The survey asked participants to rate their agreement

as to whether the following description of collaboration expressed a concept that is

essential to the development of wisdom in organizational leaders: "As it pertains to

developing wisdom in organizational leaders; Collaboration is acting within the context

of one's meaning and/or purpose in life in a way that enables others to do the same while

striving together to achieve the purpose of the organization." The frequency distribution

of responses to the collaboration description can be seen in Table 15. The mean response

was 6.02, with 93.1% of participants indicating agreement with the collaboration

description.

Table 15

Collaboration Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	4	1.1	1.3
	Somewhat Disagree	4	1.1	2.4
	Neither Agree or Disagree	17	4.5	6.9
	Somewhat Agree	53	14.1	21.1
	Agree	169	45.1	66.1
	Strongly Agree	127	33.9	100.0
	Total	375	100.0	

Mean
6.02

Nine leaders disagreed with the collaboration description (2.4%), and eight

provided comments as to what changes would allow them to choose *Strongly Agree*.

Two participants disagreed that collaboration was related to wisdom. Two participants

disagreed with collaboration being related to life purpose. Three comments indicated that

collaboration did not necessarily result in all parties doing the "same." One participant

indicated disagreement with the description but not how it should be changed. All comments can be found in Appendix F.

Spirituality description. The survey asked participants to rate their agreement as to whether the following description of spirituality expressed a concept that is essential to the development of wisdom in organizational leaders:

As it pertains to developing wisdom in organizational leaders; most religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from a higher power or being. Continuous spiritual growth and formation that is planned and intentional is fundamental to acquiring and refining personal wisdom.

The frequency distribution of responses to the spirituality description can be seen in Table 16. The mean response was 4.49, with 51.2% of participants indicating agreement with the spirituality description.

Table 16

Spirituality Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	19	5.1	5.1
	Disagree	35	9.3	14.4
	Somewhat Disagree	33	8.8	23.2
	Neither Agree or Disagree	96	25.6	48.8
	Somewhat Agree	82	21.9	70.7
	Agree	69	18.4	89.1
	Strongly Agree	41	10.9	100.0
	Total	375	100.0	

Mean
4.49

Eighty-seven leaders disagreed with the spirituality description (23.2%), and 70 provided comments as to what changes would allow them to choose *Strongly Agree*. These comments were coded into eight distinct categories. The comments are categorized as follows: 19 indicated that spirituality and work are separate; 14 objected to any reference to a higher power or being; eight participants noted that spirituality was one of many ways to wisdom, another eight suggested a focus on history or community instead of spirituality; seven participants rephrased the description in various ways; five comments said spirituality was fine for some people but not a requirement; another five participants indicated agreement with the spirituality portion but objected to community as part of the definition; and, four leaders commented that it should say morality or ethics instead of spirituality. Figure 3 displays the spirituality description comment distribution.
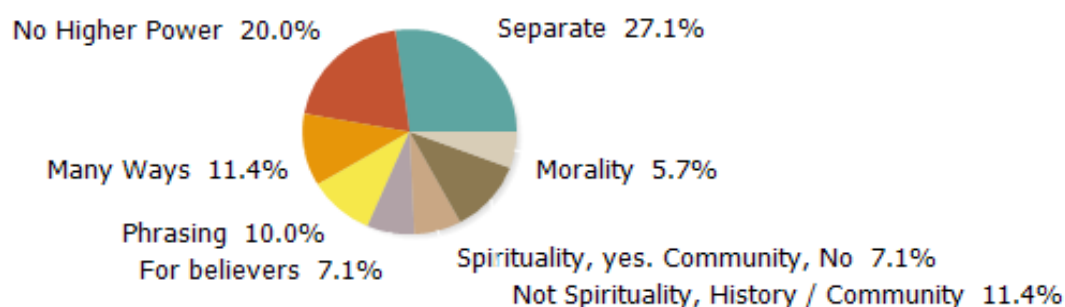
Figure 3. Distribution of the spirituality description comments. Percentages listed are of comments, not total participants.

WBLM Constructs Describe Wisdom in Organizational Leaders

The final analysis for the H_{A1} hypothesis sought to quantify organizational leaders' perception of the WBLM constructs as describing wisdom in organizational leaders. As noted, a Kolmogorov–Smirnov test showed that the data were nonparametric

(<.05; see Appendix E). This skew to the data indicated that organizational leaders did agree with the description of wisdom as described by the WBLM.

The survey asked participants to rate their agreement as to whether the following description of wisdom is essential to describing wisdom in organizational leaders: "Please review the constructs below that have been presented as essential to describing wisdom in organizational leaders: Knowledge, Experience, Community, Critical Thinking, Reflection, Deliberation, Authenticity, Courage, Collaboration, and Spirituality." The frequency distribution of responses to the wisdom description can be seen in Table 17. The mean response was 5.95, with 93.9% of participants indicating agreement with the wisdom description.

Table 17

WBLM Constructs Describe Wisdom in Organizational Leaders Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	3	.8	1.1
	Somewhat Disagree	6	1.6	2.7
	Neither Agree or Disagree	9	2.4	5.1
	Somewhat Agree	57	15.2	20.3
	Agree	207	55.2	75.5
	Strongly Agree	92	24.5	100.0
	Total	375	100.0	

Mean
5.95

Unlike the other constructs, which only provided an option for qualitative feedback when the participant disagreed, all participants were given the option to comment on additional concepts they would add to the WBLM: "What concepts would you add to the model because you think they are essential to a clear understanding of

wisdom?" Two hundred and ten comments were left in this section. These comments were coded into 29 categories. Figure 4 provides a frequency distribution of the 29 coded categories.
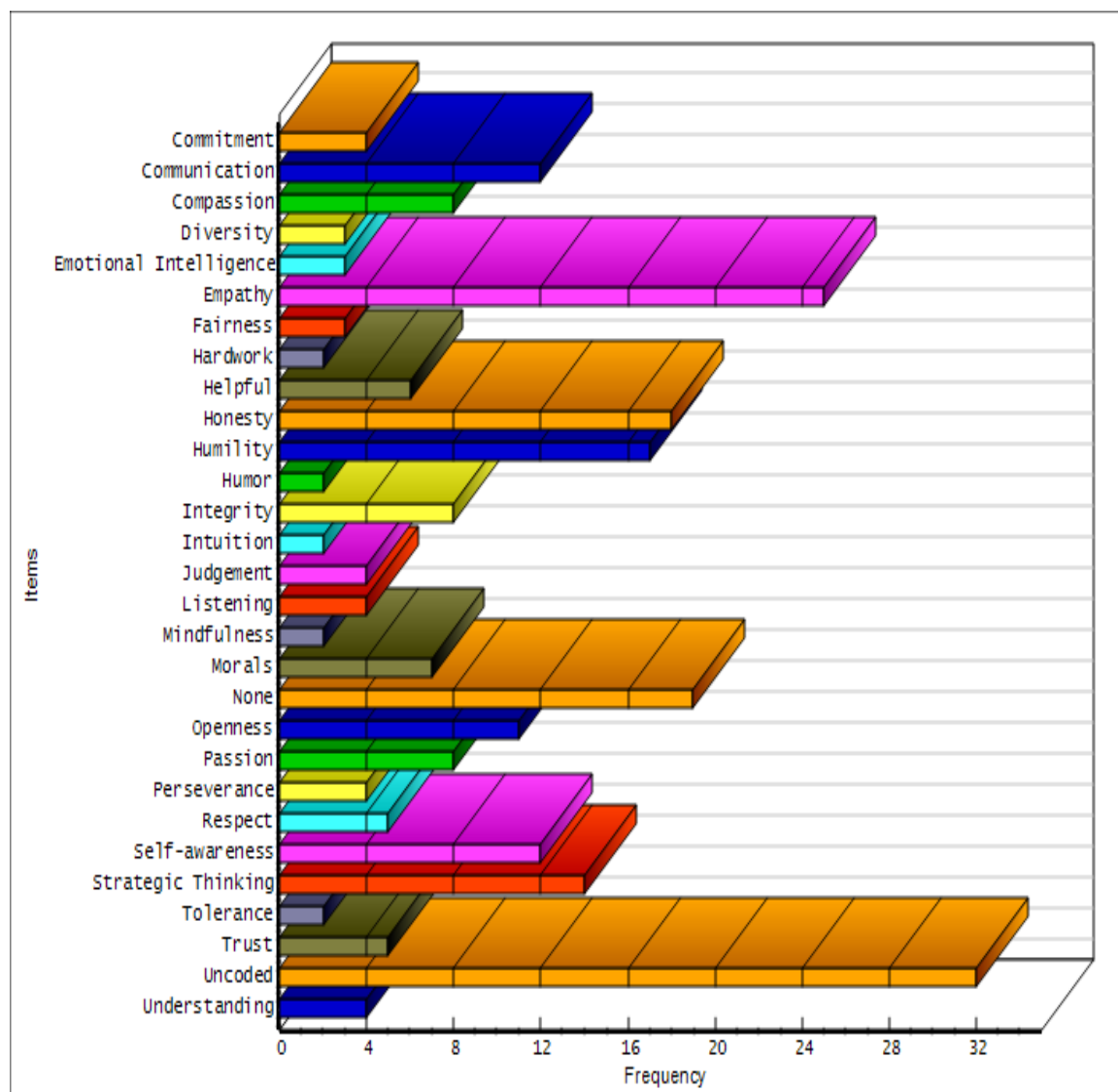
Figure 4. Frequency distribution of leader comments on additional elements to be included in the WBLM. The coding of these comments includes "none" where the leader stated the WBLM should have no additional elements and "uncoded" where the comment was unique and was unable to be categorized with others. All comments for this question can be found in Appendix G.

Hypothesis One Analysis

The mean response for each of the WBLM construct descriptions was analyzed to assess this hypothesis. Table 18 summarizes the descriptive statistics for each of the WBLM constructs, indicating the mean response on a Likert scale of 1 *Strongly Disagree* to 7 *Strongly Agree* for each description.

Table 18

WBLM Construct Descriptions Central Tendency and Dispersion Statistics

	KN	EX	CM	CT	RE	DE	AU	CG	CB	SP	WI
N	375	375	375	375	375	375	375	375	375	375	375
Mean	6.02	5.96	5.76	6.34	5.90	6.22	5.84	6.17	6.02	4.49	5.95
SD	.746	.914	.971	.720	.930	.827	1.090	.934	.998	1.620	.912
Variance	.556	.835	.944	.519	.865	.683	1.188	.873	.997	2.625	.832

Note: KN=Knowledge, EX=Experience, CM=Community, CT=Critical Thinking, RE=Reflection, DE=Deliberation, AU=Authenticity, CG=Courage, CB=Collaboration, SP=Spirituality, WI=WBLM Constructs

The data summarized in Table 18 indicates a level of agreement with the WBLM construct descriptions. For nine of the ten descriptions, the mean level of agreement was over 5.75. This mean indicated a high range of agreement for nearly all of the descriptions. The lowest mean of 4.49 is still above the midpoint of the scale and shows slight agreement. The mean response to the question of whether the WBLM constructs describe wisdom in organizational leaders was 5.95.

A Wilcoxon test was used to compare the median responses of the construct descriptions of the WBLM. The Wilcoxon test is the nonparametric equivalent of the paired-samples *t* test and must use ordinal data (Cronk, 2008). For this study the Wilcoxon test compared the median of each construct description to a null hypothesis that assumed an equal distribution of responses and a median of 4. A significant

difference was found in the results (p < .001) for each of the construct descriptions when compared to the midpoint of 4. A summary of the Wilcoxon tests can be found in Appendix I.

The results of the Wilcoxon test supported a rejection of the null hypothesis H_{01}. Thus, the hypothesis H_{A1} is supported: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents. The organizational leaders also agreed that the description of wisdom in this study described wisdom in organizational leaders.

Leader Perception of Correlations Between WBLM Constructs

The second set of hypotheses was

H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

H_{02}: There will not be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

To test this hypothesis, two inferential statistical analyses were performed. The analysis for the previous hypothesis revealed that the data collected were nonparametric (see Appendix E). Therefore, the tests used for this hypothesis were appropriate for nonparametric data. A Spearman's *rho* shows correlation of variance to study the

important relationships of the data (Cronk, 2008). A factor analysis was also conducted to determine the structural integrity of the model.

Construct Correlation Analysis

Both inter-operational and intra-operational correlational analyses were considered critical to this data set.

The constructs are grouped together through their inter-operational function for the first correlational analysis. Ludden (2015) explained the three stages of the WBLM as accumulation, amplification, and action. The accumulation stage has the constructs of knowledge, experience, and community. The amplification stage has the constructs of critical thinking, reflection, and deliberation. The action stage has the constructs of authenticity, courage, and collaboration.

The second correlational analysis examined the constructs that shared the same intra-operational function. Ludden (2013) explained that wisdom engages a person's cognitive, affective, and conative abilities. The constructs of the WBLM align with these three abilities. The constructs of knowledge, critical thinking, and authenticity were considered cognitive; the constructs of experience, reflection, and courage were considered affective; and, the constructs of community, deliberation, and collaboration were conative. The constructs associated with each ability should show a significant relationship.

Correlation Sample Size

Cronk (2008) stressed the point that given a large enough sample, any correlation can become significant. Therefore, Cronk noted that the effect size becomes critically important for the interpretation of correlations: "The standard measure of effect size for

correlations is the coefficient of determination (r^2)" (p. 106). To find the effect size, the dependent variable was that the WBLM constructs describe wisdom in organizational leaders, and the independent variables were the construct descriptions.

Table 19 shows the coefficient of determination between these variables was 0.338. That result indicated that almost 34% of the variability in the WBLM was accounted by the relationship with the descriptions. Therefore, the correlations between these variables were significant.

Table 19

Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.581[a]	.338	.320	.759

a. Predictors: (Constant), Spirituality, Critical Thinking, Knowledge, Experience, Collaboration, Courage, Community, Authenticity, Deliberation, Reflection

Inter-Construct Correlation

The WBLM stated the accumulation stage of knowledge, experience, and community; the amplification stage of critical thinking, reflection, and deliberation; and, the action stage of authenticity, courage, and collaboration work together with spirituality to develop wisdom in a leader (Ludden, 2015). A Spearman *rho* correlation of variance for the nonparametric data was conducted to measure the strength of the relationship between the constructs composing these stages. Cronk (2008) explained that correlations between 0.3 and 0.7 are considered moderate. The internal consistency of each WBLM stage—accumulation (knowledge, experience, community), amplification (critical thinking, reflection, deliberation) and action (authenticity, courage, collaboration)—is

expected to be at least moderately related to each other ($r \geq 0.30$). Any correlation less than 0.3 is considered weak (Cronk, 2008).

Accumulation correlations. Table 20 shows the correlation analysis for the accumulation stage constructs of knowledge, experience, and community.

Table 20

Correlations Between Accumulation Stage Construct Descriptions

	Analysis		Knowledge	Experience	Community
Spearman's *rho*	Knowledge description	Correlation Coefficient	1.000	.302[**]	.290[**]
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Experience description	Correlation Coefficient	.302[**]	1.000	.309[**]
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Community description	Correlation Coefficient	.290[**]	.309[**]	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of knowledge and (b) of experience. A moderate positive correlation was found, *rho* (373) = .302, p < .001, indicating a significant relationship between the two variables. The descriptions of knowledge and experience were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of knowledge and (b) of community. A weak positive correlation was found, *rho* (373) = .290, p < .001, indicating a significant relationship between the two variables. The descriptions of knowledge and community were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of experience and (b) of community. A moderate positive correlation was found, *rho* (373) = .309, p < .001, indicating a significant relationship between the two variables. The descriptions of experience and community were related.

The Spearman *rho* correlation analysis of the accumulation stage showed a statistically significant correlation among these three constructs. The constructs of knowledge and community were weakly related, while knowledge and community were both moderately related to experience.

Amplification correlations. Table 21 shows the correlation analysis for the amplification stage constructs of critical thinking, reflection, and deliberation.

Table 21

Correlations Between Amplification Stage Construct Descriptions

	Analysis		Critical Thinking	Reflection	Deliberation
Spearman's *rho*	Critical Thinking description	Correlation Coefficient	1.000	.309**	.398**
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Reflection description	Correlation Coefficient	.309**	1.000	.396**
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Deliberation description	Correlation Coefficient	.398**	.396**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the description of critical thinking and reflection. A moderate positive correlation was found, *rho* (373) = .309, p < .001, indicating a

significant relationship between the two variables. The descriptions of critical thinking and reflection were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of critical thinking and (b) of deliberation. A moderate positive correlation was found, *rho* (373) = .398, p < .001, indicating a significant relationship between the two variables. The descriptions of critical thinking and reflection were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of reflection and (b) of deliberation. A moderate positive correlation was found, *rho* (373) = .396, p < .001, indicating a significant relationship between the two variables. The descriptions of experience and community were related.

The Spearman *rho* correlation analysis indicated moderate positive correlations between the constructs of the amplification stage. The constructs of the amplification stage are all related.

Action correlations. Table 22 shows the correlation analysis for the action stage constructs of authenticity, courage, and collaboration.

Table 22

Correlations Between Action Stage Construct Descriptions

	Analysis		Authenticity	Courage	Collaboration
Spearman's *rho*	Authenticity description	Correlation Coefficient	1.000	.347**	.415**
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Courage description	Correlation Coefficient	.347**	1.000	.396**
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Collaboration description	Correlation Coefficient	.415**	.396**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of authenticity and (b) of courage. A moderate positive correlation was found, *rho* (373) = .347, p < .001, indicating a significant relationship between the two variables. The descriptions of authenticity and courage were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of authenticity and (b) of collaboration. A moderate positive correlation was found, *rho* (373) = .415, p < .001, indicating a significant relationship between the two variables. The descriptions of authenticity and collaboration were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of courage and (b) of collaboration. A moderate positive correlation was found, *rho* (373) = .396, p < .001, indicating a

significant relationship between the two variables. The descriptions of courage and collaboration were related.

The Spearman *rho* correlation analysis indicated moderate positive correlations between the constructs of the action stage. The constructs of the action stage are all related.

Intra-Construct Correlation

Ludden (2013) indicated in the WBLM that wisdom is achieved through the integration of an individual's cognitive, affective, and conative processes: "Wisdom is a combination of thinking, feeling, and acting" (p. 2). These processes are represented in the WBLM by three constructs each. The cognitive process is represented by knowledge, critical thinking, and authenticity; the affective process by experience, reflection, and courage; and, the conative process by community, deliberation, and collaboration. To test the internal consistency of these processes a Spearman *rho* was run for each.

Cognitive correlation. Table 23 shows the correlation analysis for the cognitive process constructs of knowledge, critical thinking, and authenticity.

Table 23

Correlations between Cognitive Process Construct Descriptions

Analysis			Knowledge	Critical Thinking	Authenticity
Spearman's *rho*	Knowledge	Correlation Coefficient	1.000	.211**	.211**
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Critical Thinking	Correlation Coefficient	.211**	1.000	.237**
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Authenticity	Correlation Coefficient	.211**	.237**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of knowledge and (b) of critical thinking. A weak positive correlation was found, *rho* (373) = .211, p < .001, indicating a significant relationship between the two variables. The descriptions of knowledge and community were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of knowledge and (b) of authenticity. A weak positive correlation was found, *rho* (373) = .211, p < .001, indicating a significant relationship between the two variables. The descriptions of knowledge and community were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of authenticity and (b) of critical thinking. A weak positive correlation was found, *rho* (373) = .237, p < .001, indicating a

significant relationship between the two variables. The descriptions of knowledge and community were related.

The constructs of knowledge, critical thinking, and authenticity in the cognitive process stage of the WBLM showed weak but statistically significant correlations. The statistical significance of the results indicated that the cognitive stage constructs are related.

Affective correlations. Table 24 shows the correlation analysis for the affective process constructs of experience, reflection, and courage.

Table 24

Correlations Between Affective Process Construct Descriptions

	Analysis		Experience	Reflection	Courage
Spearman's *rho*	Experience	Correlation Coefficient	1.000	.294**	.209**
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Reflection	Correlation Coefficient	.294**	1.000	.368**
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Courage	Correlation Coefficient	.209**	.368**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of experience and (b) of reflection. A weak positive correlation was found, *rho* (373) = .294, p < .001, indicating a significant relationship between the two variables. The descriptions of experience and reflection were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of experience and (b) of courage. A weak positive correlation was found, *rho* (373) = .209, p < .001, indicating a significant relationship between the two variables. The descriptions of experience and courage were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of reflection and (b) of courage. A moderate positive correlation was found, *rho* (373) = .368, p < .001, indicating a significant relationship between the two variables. The descriptions of reflection and courage were related.

The constructs of experience, reflection, and courage in the affect process stage of the WBLM showed mixed results. Experience showed weak but statistically significant correlations with reflection and courage. Reflection and courage showed a moderate correlation. The statistical significance of the results indicated that the affect stage constructs were related.

Conative correlations. Table 25 shows the correlation analysis for the conative process constructs of community, deliberation, and collaboration.

Table 25

Correlations Between Conative Process Construct Descriptions

	Analysis		Community	Deliberation	Collaboration
Spearman's *rho*	Community	Correlation Coefficient	1.000	.310**	.377**
		Sig. (2-tailed)	.	.000	.000
		N	375	375	375
	Deliberation	Correlation Coefficient	.310**	1.000	.417**
		Sig. (2-tailed)	.000	.	.000
		N	375	375	375
	Collaboration	Correlation Coefficient	.377**	.417**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	375	375	375

**Correlation is significant at the 0.01 level (2-tailed).

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of community and (b) of deliberation. A moderate positive correlation was found, *rho* (373) = .310, p < .001, indicating a significant relationship between the two variables. The descriptions of community and deliberation were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of community and (b) of collaboration. A moderate positive correlation was found, *rho* (373) = .377, p < .001, indicating a significant relationship between the two variables. The descriptions of community and collaboration were related.

A Spearman correlation coefficient was calculated for the relationship between organizational leader responses to the descriptions (a) of deliberation and (b) of collaboration. A moderate positive correlation was found, *rho* (373) = .417, p < .001,

indicating a significant relationship between the two variables. The descriptions of deliberation and collaboration were related.

The constructs of community, deliberation, and collaboration in the conative process stage of the WBLM showed moderate correlations. The statistical significance of the results indicated that the affect stage constructs were related.

Hypothesis Two Analysis

Hypothesis two was expressed as the following:

H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

H_{02}: There will not be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

The correlation analysis among the WBLM constructs showed the correlation to be weak in six of 18 instances, while the remaining 12 instances had a moderate relationship. The inter-construct correlation analysis showed stronger relationships with eight of the nine showing a moderate correlation. The intra-construct correlations showed weak relationships for five of the nine correlations. However, all correlations were statistically significant. The statistical significance of the correlation results combined with the Wilcoxon test level of significance ($p < .001$) indicated that the null hypothesis associated with hypothesis two could be rejected. Thus, hypothesis H_{A2} was

supported. The weak correlations between some constructs show areas for potential future study.

Testing Hypothesis Three—Importance of Wisdom in Organizational Leaders

The third hypothesis associated with this study examined the perception of organizational leaders on the importance of developing wisdom in leaders. The hypotheses were presented as

H_{A3}: Organizational leaders will agree that they perceive developing wisdom in leaders is important.

H_{03}: Organizational leaders will not agree that they perceive developing wisdom in leaders is important.

The data analysis for the investigation of hypothesis three was very similar to that used with the investigation of hypothesis one. Individual analysis was performed on each of the construct data sets. The quantitative response frequency distribution and mean have been shown for the responses to each construct.

The quantitative survey data were gathered using a Likert scale as seen in Figure 5. The scale offers a continuum selection from *Strongly Disagree* on the far left to *Strongly Agree* on the far right. This seven-point scale did not display numbers.
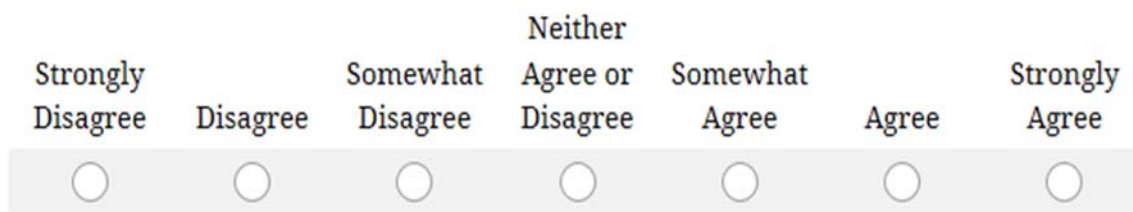
Figure 5. Likert response scale used in survey.

The midpoint on the scale was coded as 4 for statistical analysis to indicate a neutral response. Any response rating above 4 indicated agreement, and responses below

4 were considered in the disagreement range. Participants who disagreed were given an opportunity to provide a qualitative response to explain what they would change about the construct to allow them to choose *Strongly Agree*. The combination of quantitative and qualitative data can provide a more complete understanding than either one alone (Miles et al., 2014). The qualitative responses to each description were coded using QDA Miner (Version 2.0.1; Provalis, 2016). Bazeley (2013) suggested that short responses to self-completed questionnaires can be coded and categorized question-by-question, rather than coded along with the responses to the entire survey. The participant qualitative responses to wisdom as a leadership outcome can be found in Appendix H.

Leaders' Perceptions on Importance of Developing Wisdom

The participants were directly asked to rate their perceptions of two wisdom statements based on the following description:

As it pertains to developing wisdom in organizational leaders, wisdom is a dynamic process a leader uses to apply knowledge, experience, and virtue to seek truth that subsequently governs the leader's actions and decisions for the organization. Wisdom engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement. Wisdom is manifested by continuously seeking more knowledge, experience, and virtuosity to achieve these ends.

The first statement based on the wisdom description: "This description of wisdom expresses a concept that is essential to developing in organizational leaders."

The second statement based on the wisdom description: "Wisdom is a concept that is an important outcome of organizational leadership."

The responses to these two statements about wisdom, when combined with the responses about individual construct outcomes, can answer the question of whether these organizational leaders consider the development of wisdom important.

Wisdom essential in developing organizational leaders. The survey asked participants to rate their agreement as to whether this description of wisdom expressed a concept that is essential to the development of wisdom in organizational leaders. The frequency distribution of responses to the wisdom description can be seen in Table 26. The mean response was 6.10, with 93.9% of participants indicating agreement with the wisdom description.

Table 26

Wisdom Description Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	3	.8	.8
	Somewhat Disagree	3	.8	1.6
	Neither Agree nor Disagree	17	4.5	6.1
	Somewhat Agree	43	11.5	17.6
	Agree	175	46.7	64.3
	Strongly Agree	134	35.7	100.0
	Total	375	100.0	

Mean
6.10

Six participants (1.6%) disagreed that this description of wisdom is a concept that is an important outcome of organizational leadership. Five of the leaders provided comments, but they were all unique perspectives and unable to be coded. All participant comments on the WBLM construct descriptions can be found in Appendix H.

Wisdom as an important leadership outcome. Participants were asked whether they considered wisdom a concept that is an important outcome of organizational

leadership. The frequency distribution of responses to this question is shown in Table 27, with 92% of participants indicating agreement. The mean response score for the wisdom construct being an important outcome of organizational leadership was 5.99.

Table 27

Wisdom as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	1	.3	.3
	Disagree	5	1.3	1.6
	Somewhat Disagree	4	1.1	2.7
	Neither Agree nor Disagree	20	5.3	8.0
	Somewhat Agree	49	13.1	21.1
	Agree	174	46.4	67.5
	Strongly Agree	122	32.5	100.0
	Total	375	100.0	

Mean
5.99

Ten participants (2.7%) disagreed that wisdom is an important outcome of organizational leadership. All 10 of the leaders provided comments. Two comments indicated that wisdom is intrinsic. Two other comments disagreed without offering a way to change the statement. The other six comments were all unique and unable to be coded. All participant comments on the WBLM constructs as leadership outcomes can be found in Appendix H.

WBLM Constructs as Organizational Leadership Outcomes

Although 92% of participants agreed that wisdom is an important outcome of organizational leadership, parsing wisdom into its separate WBLM constructs is useful. Participants were asked to rate their agreement with each of the WBLM constructs as outcomes of organizational leadership.

Knowledge as an important leadership outcome. Participants were asked whether they considered knowledge an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 28, with 90.2% of participants indicating agreement. The mean response score for the knowledge construct being an important outcome of organizational leadership was 5.71.

Table 28

Knowledge as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	3	.8	.8
	Disagree	2	.5	1.3
	Somewhat Disagree	11	2.9	4.3
	Neither Agree nor Disagree	21	5.6	9.9
	Somewhat Agree	75	20.0	29.9
	Agree	199	53.1	82.9
	Strongly Agree	64	17.1	100.0
	Total	375	100.0	

Mean
5.71

Sixteen leaders (4.3%) disagreed that knowledge is an important outcome of organizational leadership. Fifteen of those leaders provided comments. Seven of the comments indicated that knowledge was not an outcome of leadership. Two leaders questioned whether knowledge was a concept. The remaining six comments were unique and can be found in Appendix H.

Experience as an important leadership outcome. Participants were asked whether they considered experience an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 29, with 92.5%

of participants indicating agreement. The mean response score for the experience

construct being an important outcome of organizational leadership was 5.86.

Table 29

Experience as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	6	1.6	1.6
	Somewhat Disagree	5	1.3	2.9
	Neither Agree nor Disagree	17	4.5	7.5
	Somewhat Agree	71	18.9	26.4
	Agree	184	49.1	75.5
	Strongly Agree	92	24.5	100.0
	Total	375	100.0	

Mean
5.86

Eleven participants (2.9%) disagreed that experience is an important outcome of

organizational leadership. All 11 of the leaders provided comments. Five comments

objected to the idea of experience as an outcome. The other six comments were all

unique and unable to be coded. All participant comments on the WBLM constructs as

leadership outcomes can be found in Appendix H.

Community as an important leadership outcome. Participants were asked

whether they considered community an important outcome of organizational leadership.

The frequency distribution of responses to this question is shown in Table 30, with 84.3%

of participants indicating agreement. The mean response score for the community

construct being an important outcome of organizational leadership was 5.54.

Table 30

Community as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	7	1.9	1.9
	Somewhat Disagree	9	2.4	4.3
	Neither Agree nor Disagree	43	11.5	15.7
	Somewhat Agree	93	24.8	40.5
	Agree	163	43.5	84.0
	Strongly Agree	60	16.0	100.0
	Total	375	100.0	

Mean
5.54

Sixteen leaders (4.3%) disagreed that community is an important outcome of organizational leadership. Twelve of those leaders provided comments. Five of the comments indicated that community was not an outcome of leadership; most indicated it was a component or input instead. Two leaders indicated that community was not necessarily important to leadership. Three comments related to community as an ideal for leadership. The remaining two comments were unique and can be found in Appendix H.

Critical thinking as an important leadership outcome. Participants were asked whether they considered critical thinking an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 31, with 92.5% of participants indicating agreement. The mean response score for the critical thinking construct being an important outcome of organizational leadership was 6.10.

Table 31

Critical Thinking as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	5	1.3	1.3
	Somewhat Disagree	9	2.4	3.7
	Neither Agree nor Disagree	14	3.7	7.5
	Somewhat Agree	35	9.3	16.8
	Agree	166	44.3	61.1
	Strongly Agree	146	38.9	100.0
	Total	375	100.0	

Mean
6.10

Fourteen leaders (3.7%) disagreed that critical thinking is an important outcome of organizational leadership. Thirteen of those leaders provided comments. Seven of the comments indicated that critical thinking was an input into organizational leadership. The remaining six comments were unique and can be found in Appendix H.

Reflection as an important leadership outcome. Participants were asked whether they considered reflection an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 32, with 88% of participants indicating agreement. The mean response score for the reflection construct being an important outcome of organizational leadership was 5.76.

Table 32

Reflection as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	7	1.9	1.9
	Somewhat Disagree	6	1.6	3.5
	Neither Agree nor Disagree	32	8.5	12.0
	Somewhat Agree	69	18.4	30.4
	Agree	172	45.9	76.3
	Strongly Agree	89	23.7	100.0
	Total	375	100.0	

Mean
5.76

Thirteen leaders (3.5%) disagreed that reflection is an important outcome of organizational leadership. Eleven of those leaders provided comments. Six of the comments indicated that reflection is an input, not outcome, of leadership. The remaining five comments were unique and can be found in Appendix H.

Deliberation as an important leadership outcome. Participants were asked whether they considered deliberation a concept that is an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 33, with 91.3% of participants indicating agreement. The mean response score for the deliberation construct being an important outcome of organizational leadership was 5.98.

Table 33

Deliberation as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	4	1.1	1.1
	Somewhat Disagree	3	.8	1.9
	Neither Agree nor Disagree	26	6.9	8.8
	Somewhat Agree	49	13.1	21.9
	Agree	175	46.7	68.5
	Strongly Agree	118	31.5	100.0
	Total	375	100.0	

Mean
5.98

Seven leaders (1.9%) disagreed that deliberation is an important outcome of organizational leadership. Six of those leaders provided comments. Four of the comments indicated that deliberation contributed to organizational leadership. The remaining two comments were unique and can be found in Appendix H.

Authenticity as an important leadership outcome. Participants were asked whether they considered authenticity an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 34, with 84.9% of participants indicating agreement. The mean response score for the authenticity construct being an important outcome of organizational leadership was 5.76.

Table 34

Authenticity as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	4	1.1	1.1
	Disagree	3	.8	1.9
	Somewhat Disagree	10	2.7	4.5
	Neither Agree nor Disagree	40	10.7	15.2
	Somewhat Agree	58	15.5	30.7
	Agree	151	40.3	70.9
	Strongly Agree	109	29.1	100.0
	Total	375	100.0	

Mean
5.76

Seventeen leaders (4.5%) disagreed that authenticity is an important outcome of organizational leadership. Fifteen of those leaders provided comments. Four of the comments indicated that the order should be reversed, with leadership being an outcome of authenticity. Two leaders commented that authenticity is intrinsic and not an outcome of anything external. Another two comments stated that the organizational culture played a role in fostering authenticity. Two comments disagreed with the description without an explanation of how to change it. The remaining five comments were unique and can be found in Appendix H.

Courage as an important leadership outcome. Participants were asked whether they considered courage a concept that is an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 35, with 90.5% of participants indicating agreement. The mean response score for the courage construct being an important outcome of organizational leadership was 5.97.

Table 35

Courage as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	2	.5	.5
	Disagree	6	1.6	2.1
	Somewhat Disagree	9	2.4	4.5
	Neither Agree nor Disagree	19	5.1	9.6
	Somewhat Agree	49	13.1	22.7
	Agree	154	41.1	63.7
	Strongly Agree	136	36.3	100.0
	Total	375	100.0	

Mean
5.97

Seventeen leaders (4.5%) disagreed that courage is an important outcome of organizational leadership. Fifteen of those leaders provided comments. Six of the comments indicated that courage contributed to leadership. Three leaders commented that courage is intrinsic. The remaining six comments were unique and can be found in Appendix H.

Collaboration as an important leadership outcome. Participants were asked whether they considered collaboration an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 36, with 91.7% of participants indicating agreement. The mean response score for the collaboration construct being an important outcome of organizational leadership was 6.01.

Table 36

Collaboration as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Disagree	7	1.9	1.9
	Somewhat Disagree	4	1.1	2.9
	Neither Agree nor Disagree	20	5.3	8.3
	Somewhat Agree	50	13.3	21.6
	Agree	159	42.4	64.0
	Strongly Agree	135	36.0	100.0
	Total	375	100.0	

Mean
6.01

Eleven leaders (2.9%) disagreed that collaboration is an important outcome of organizational leadership. Nine of those leaders provided comments. Four of the comments indicated that collaboration should be a requirement for leadership. Two leaders questioned the importance of collaboration as related to wisdom and organizational leadership. Two comments noted the importance of removing personal goals from business decisions. The remaining comment added listening to the description.

Spirituality as an important leadership outcome. Participants were asked whether they considered spirituality an important outcome of organizational leadership. The frequency distribution of responses to this question is shown in Table 37, with 43.4% of participants indicating agreement. The mean response score for the spirituality construct being an important outcome of organizational leadership was 4.21.

Table 37

Spirituality as an Important Outcome of Organizational Leadership Frequency Distribution and Mean

Response		Frequency	%	Cumulative %
Valid	Strongly Disagree	21	5.6	5.6
	Disagree	50	13.3	18.9
	Somewhat Disagree	28	7.5	26.4
	Neither Agree nor Disagree	113	30.1	56.5
	Somewhat Agree	84	22.4	78.9
	Agree	50	13.3	92.3
	Strongly Agree	29	7.7	100.0
	Total	375	100.0	
Mean 4.21				

Ninety-nine leaders (26.4%) disagreed that spirituality is an important outcome of organizational leadership. Seventy-six of those leaders provided comments. These comments were coded into eight distinct categories: 28 indicated that spirituality and work are separate; 14 comments were in flat disagreement without additional input; 10 leaders indicated that spirituality was fine for some people but not a requirement; seven objected to any reference to a higher power or being; six leaders commented that it should say morality or ethics instead of spirituality; four participants noted that spirituality was one of many ways to wisdom; another four comments noted that spirituality is a component of wisdom; and, three leaders wanted a better understanding of how spirituality was being defined. Figure 6 shows the spirituality outcome comment distribution.
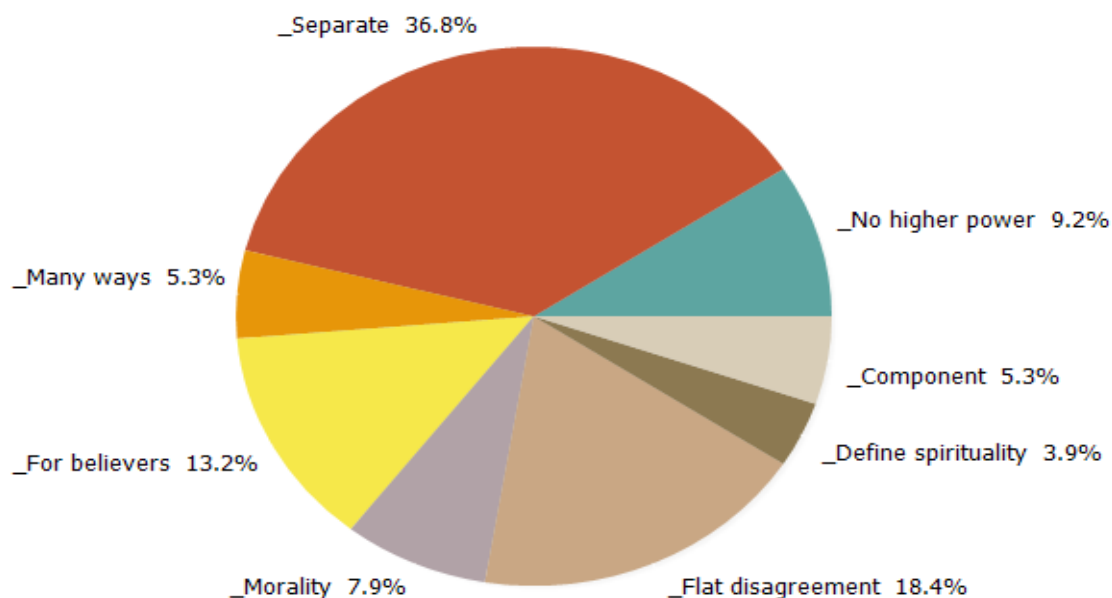
Figure 6. Distribution of comments for spirituality as a leadership outcome.

Hypothesis Three Analysis

As presented in Table 38, the mean level of agreement with the WBLM constructs was over 5.50 for nine of the 10 constructs. This mean indicates that the participants held a high range of agreement. The lowest mean of 4.21 for spirituality is still above the median of 4.0 and falls in the agreement range, although less strongly than the other constructs. This agreement by the participants on all of the constructs related to wisdom as an outcome of organizational leadership allows the rejection of the null hypothesis H_{03}. Additionally, the participant agreements on the two wisdom statements were among the highest observed with means of 6.10 and 5.99, respectively. These cumulative results support hypothesis H_{A3}, which stated, "Organizational leaders will agree that they perceive developing wisdom in leaders is important."

Table 38

WBLM Constructs as Important Leadership Outcome Central Tendency and Dispersion Statistics

	KN	EX	CM	CT	RE	DE	AU	CG	CB	SP	WD	WO
N	375	375	375	375	375	375	375	375	375	375	375	375
Mean	5.71	5.86	5.54	6.10	5.76	5.98	5.76	5.97	6.01	4.21	6.10	5.99
SD	1.031	.988	1.081	1.027	1.073	.984	1.205	1.142	1.051	1.590	.920	1.024
Variance	1.062	.975	1.169	1.055	1.151	.967	1.452	1.304	1.104	2.527	.846	1.048

Note: KN=Knowledge, EX=Experience, CM=Community, CT=Critical Thinking, RE=Reflection, DE=Deliberation, AU=Authenticity, CG=Courage, CB=Collaboration, SP=Spirituality, WD=Wisdom Description, WO, Wisdom Outcome

A Wilcoxon test examined each of these constructs as an important leadership outcome. For each construct outcome, with the exception of spirituality, a significant difference (p < .01) was found when compared to the midpoint of the scale. These test results can be seen in Appendix J. These results also supported the rejection of the null hypothesis H_{03}.

Conclusion

This study gained insight into the WBLM from 375 leaders from multiple industries, levels of experience, and geographic locations. The variety of perspectives these leaders brought to this study allowed for a deeper look at the WBLM and its constructs.

The first hypothesis considered whether each construct description that makes up the WBLM independently captures the essence of the construct it represents. The responses by the participant leaders supported the rejection of the null hypothesis. The leaders showed agreement that the 10 WBLM constructs each captured the essence of the represented construct.

Hypothesis two sought agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—

describe wisdom in organizational leaders. The correlation analysis for hypothesis two showed significant correlations for both the inter-construct and intra-construct dimensions of the model. However, some of the relationships between constructs were weak and may require further study. These results allowed for the rejection of null hypothesis two.

The third hypothesis considered whether leaders perceived developing wisdom in leaders important. Analysis of the data allowed for the rejection of the null hypothesis, indicating agreement by the participants that developing wisdom in leaders is important.

CHAPTER FIVE—DISCUSSION AND CONCLUSIONS

Leaders who seek to increase their wisdom need operational models and tools drawn from academic research. This study used the Wisdom-Based Leadership Model to gather organizational leader perceptions of both the components of wisdom and the importance of wisdom development. This chapter provides a summary overview of the results of the study and relates those results to previous research. Conclusions detailing the significant findings are presented. The implications and limitations of the study results on the practice and development of organizational leadership are discussed. Finally, suggestions are made for the future research in this field.

Summary Overview of Results

This study followed the work by Livingston (2012) and Peterson (2016). Each used a WBLM-based questionnaire with questions that were slightly modified to relate to their research populations. This study followed the same model, modifying the questions to best fit the participant population of organizational leaders. The leadership population in this instance was defined as individuals who had managerial authority and responsibility within the participant organization. The application of this leadership definition resulted in a population of 1,039 leaders. A census was initiated through the organizational email system, inviting every leader within the organization to participate.

Leaders who chose to participate were directed to an online questionnaire conducted through SurveyMonkey. The total number of respondents was 441 or 42.44%. The number of completed surveys was 375 or 36%. Using a seven-point Likert scale, the participant leaders were asked to rate their agreement to statements regarding the 10 constructs of the WBLM and the importance of developing wisdom. Leedy and Ormrod

(2010) explained that rating scales of this type are useful when assessing people's attitudes. However, they also warned that quantifying people's attitudes into a scale can result in the loss of valuable information that qualifies individual responses. To mediate that limitation, participants who disagreed with a construct statement were also given the option to provide qualitative feedback. The following hypotheses were used in this study:

- H_{A1}: There will be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

- H_{01}: There will not be agreement by organizational leaders that each of the ten constructs that make up the WBLM independently captures the essence of the construct it represents.

- H_{A2}: There will be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality— describe wisdom in organizational leaders.

- H_{02}: There will not be agreement by organizational leaders that the ten constructs of the Wisdom-Based Leadership Model—knowledge, experience, community, critical thinking, reflection, deliberation, authenticity, courage, collaboration, and spirituality—describe wisdom in organizational leaders.

- H_{A3}: Organizational leaders will agree that they perceive developing wisdom in leaders is important.

• H$_{03}$: Organizational leaders will not agree that they perceive developing wisdom in leaders is important.

Hypothesis One

The data gathered in relation to hypothesis one measured organizational leader agreement that each construct of the WBLM independently captures the essence of the construct it represents. For nine of the ten descriptions, the mean level of agreement by organizational leaders was over 5.75. This mean indicated a high range of agreement for nearly all of the descriptions. The lowest mean of 4.49 was still above the midpoint of the scale and showed slight agreement. These levels of agreement, combined with a significant difference ($p < .001$) for the one-sample Wilcoxon signed rank test, allowed for the rejection of the null hypothesis H$_{01}$. Thus, the alternative hypothesis H$_{A1}$ was accepted.

Hypothesis Two

For the second hypothesis, organizational leaders were asked to rate their agreement that the 10 constructs of the WBLM described wisdom in organizational leaders. The coefficient of determination between these variables was 0.338, indicating that almost 34% of the variability in the WBLM was accounted for by the relationship with the descriptions. This coefficient of determination indicated that the correlations between these variables were significant, and the null hypothesis H$_{02}$ was rejected. Thus, the alternative hypothesis H$_{A2}$ was accepted.

Hypothesis Three

The third hypothesis associated with this study examined the perception of organizational leaders on the importance of developing wisdom in leaders. The mean

level of agreement by organizational leaders that the WBLM constructs were important outcomes of leadership were over 5.50 for nine of the 10 constructs, with the exception being the spirituality outcome. For the specific question of whether leaders considered wisdom an important outcome of organizational leadership, 92% of leaders agreed with a mean response of 5.99. This mean showed significant agreement by organizational leaders that they considered the development of wisdom important. Therefore, the null hypothesis H_{03} was rejected. Thus, the alternative hypothesis H_{A3} was accepted.

Relationship of Study Results to Previous Research

This study followed the work done by Livingston (2012) with executive coaches and Peterson (2016) with Christian college presidents and used the WBLM to directly question organizational leaders about wisdom in organizational leadership. The similarity of the results in this study to that of the previous research further supported the use of the WBLM as a resource for the study of wisdom in organizational leadership.

Livingston's Research with Executive Coaches

Livingston's (2012) study was the first to use the WBLM in this type of research, and the methodology of using the WBLM as a quantitative survey with qualitative written responses for the clarification of participant disagreement was replicated by Peterson (2016) and in this current research. Livingston (2012) had 184 executive coaches participate in his research with a response rate of 25.41%. The participant coaches agreed with hypothesis one that the constructs of the WBLM captured the essence of wisdom. Livingston's second hypothesis, that each of the 10 constructs of the WBLM described wisdom in executive coaches, was ultimately rejected due to weak relationships in the model dimensions. The third hypothesis in Livingston's study,

whether executive coaches perceived their job to be one that involved developing wisdom in organizational leaders, was supported.

The replication of Livingston's (2012) study allowed for an interesting comparison between the perspectives of executive coaches and organizational leaders. Like the executive coaches in Livingston's study, the organizational leaders in this study agreed that the constructs of WBLM captured the essence of wisdom. Both groups also agreed that developing wisdom in organizational leaders is important. As an interesting distinction between these studies, Livingston's executive coaches were advocating the importance of developing wisdom in others, presumably their client leaders. In the present study, the organizational leaders indicated that developing wisdom was important for leaders, which indicated an ownership of the need for wisdom development.

The results of the present study differed from that of Livingston (2012) in regard to the second hypothesis, that each of the 10 constructs of the WBLM described wisdom in organizational leaders. Livingston was unable to reject the null hypothesis because the correlation analyses showed weak relationships in 11 of 18 instances. However, the current study showed a moderate relationship in 12 of 18 instances, with all 18 correlations being statistically significant. The statistical significance of the correlation results combined with the Wilcoxon test level of significance (p < .001) indicated that the null hypothesis associated with hypothesis two could be rejected.

Peterson's Research with CCCU Presidents

Peterson (2016) replicated the work of Livingston (2012) and used the WBLM to study the perceptions of wisdom by college and university presidents in the Council for Christian Colleges and Universities (CCCU). Peterson used the same methodology

followed by Livingston (2012) to conduct a web-based, mixed-methods survey of the CCCU presidents. As in the present study, Peterson used a slightly modified version of Livingston's original questionnaire to fit the study population better.

Peterson (2016) received a response rate of 46% with 53 completed questionnaires. As in the present study, Peterson was able to reject all three of the null hypotheses in his study. The CCCU presidents agreed that the WBLM definition of wisdom captured the essence of wisdom, that the 10 constructs of the WBLM described wisdom in presidential leadership, and that they perceived their jobs to be one that involved developing wisdom in leaders.

Organizational Leader Wisdom Literature

The world is not getting simpler. Kaipa (2014) explained that the change of pace today is faster than ever, and the business environment is becoming increasingly complex. Küpers (2007) noted that wisdom is becoming increasingly important for dealing with the challenges of current business contexts. In short, "we now live in a VUCA world" (Bennett & Lemoine, 2014a, p. 311). VUCA stands for volatility, uncertainty, complexity, and ambiguity, and according to Bennett and Lemoine (2014a), too many leaders are confronting this VUCA world by simply throwing up their hands. Perhaps as a result of increased complexity and uncertainty, the average tenure of CEOs in major companies is growing increasingly shorter (Dotlich & Cairo, 2003).

Bennett and Lemoine (2014b) explained that lumping together the challenges of VUCA makes situations difficult to approach. The little actionable advice for dealing with VUCA makes saying that nothing can be done tempting (2014a). However, actionable advice does exist. Intezari and Pauleen (2014) offered a model of wise

responses in circumstances of extreme unpredictability. Dunham (2010) explained that practical wisdom allows for the adoption of "a richer and more complex perspective that is well suited to the dynamic and uncertain context of entrepreneurship" (p. 514). The increased literature focus on VUCA is focusing on the problem, while the resurgence in wisdom literature offers a solution.

McKenna et al. (2009) stated that modern organizations demand wise leadership for survival. The global markets and 24-hour news cycle make lapses in leadership wisdom more readily apparent than ever before. Yang (2011) pointed to recent events (e.g., credit crunch; bank failures; global, financial, and environmental crises) as the harmful effects of leaders' lack of wisdom. Perhaps related to the recent examples of foolish leadership, the focus on the connection between wise leadership and ethical action has increased (Case & Gosling, 2007; Hays, 2007; Shotter & Tsoukas, 2014; Solansky, 2014; Swartwood, 2012).

The current organizational leader wisdom literature illustrates the timeliness of this study. The organizational leaders who participated in this research are subject to the pressures typical of leadership in any large organization. These leaders must be concerned about deadlines, market share, profitability, product quality, personnel issues. In short, all of the elements of VUCA are present. These leaders are subjected daily to pressures that could promote foolish and unethical behaviors. Although Nonaka and Takeuchi (2011) stated that the ability to lead wisely has nearly vanished, 345 leaders in this study (92%) believed wisdom is important. Ludden (2015) explained why this leader response is important, "Teaching leaders to acquire and apply wisdom is one solution to

avoid unethical and foolish actions" (p. 2). The next step is to bridge any gap between believing in the importance of wisdom and actually practicing it:

Conclusions Concerning Findings

The data gathered in this study allowed for several findings that should be noted. First, the level of agreement by organizational leaders that the WBLM constructs describe wisdom in organizational leaders was significant. Of the 375 leaders who completed the survey, only 10 (2.7%) disagreed with the WBLM description of wisdom.

Second, although most leaders agreed with the WBLM description of wisdom, leaders provided 210 suggestions of concepts they thought were essential for a clear understanding of wisdom and wanted to add to the model. These comments were coded into 29 categories. Twenty-five comments indicated the need to include empathy; 18 suggested honesty; and, 17 noted the importance of humility. Strategic thinking was suggested 14 times; self-awareness and communication garnered 12 comments each. Openness, with 11, was the final suggestion with more than 10 comments. Of the remaining comments, 32 comments were unable to be coded, and 19 comments indicated that nothing in the model should be changed. These comments and their application to the definition of wisdom can be explored in future research.

The third conclusion drawn from the findings is that organizational leaders overwhelmingly agreed with the construct definitions. The mean for nine of the 10 construct descriptions was above 5.75, indicating a high range of agreement for nearly all of the descriptions. The lowest mean of 4.49 (spirituality) is still above the midpoint of the scale and shows slight agreement. These results further validated Ludden's (2015) WBLM while also showing an understanding of wisdom by organizational leaders.

The fourth conclusion of note was the high level of agreement with the critical thinking construct as related to organizational leadership. Critical thinking received the highest scores in the survey, both as a construct description and as a leadership outcome. The participant leaders clearly perceived critical thinking as both a vital part of the wisdom definition and as a fundamental part of leadership.

> Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. (Scriven & Paul, 1987, p. 1)

Participant organizational leaders rated the construct description of critical thinking with a mean of 6.34; only one leader (0.3%) disagreed with the critical thinking description. The leader rating of critical thinking as a leadership outcome was almost as high, with a mean of 6.10. Although 14 leaders (3.7%) disagreed that critical thinking was a leadership outcome, seven of those leaders took issue with the word *outcome*. They agreed with the importance of critical thinking but thought that it was an input to leadership.

Scriven and Paul (1987) described the exemplary form of critical thinking, "it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness" (p. 1). Those are powerful leadership skills, and this conceptualization explains why the participant leaders rated it so highly. However, Scriven and Paul also noted that critical thinking is never universal and that everyone is subject to irrational and undisciplined thoughts. These exceptions illustrate the

importance of critical thinking being one construct in a broader definition of wisdom, a fact that was clearly understood by the participant leaders who rated other constructs nearly as high.

Fifth, the scores in the spirituality construct were significantly lower than that of any other construct. For the construct description of spirituality as a component of wisdom 87 leaders (23.2%) expressed disagreement, and another 96 leaders (25.6%) gave a neutral response. Only 51.2% of leaders agreed with the spirituality description as a component of wisdom. This result was distinctly different than that of any other construct description.

The results for spirituality as a leadership outcome showed an even larger separation from the other outcome questions. Ninety-nine leaders (26.4%) disagreed that spirituality is an important outcome of organizational leadership. Another 113 leaders (30.1%) gave a neutral response. Only 43.5% of leaders agreed with spirituality as a leadership outcome.

Livingston (2012) found similar results for the spirituality construct: 53.9% of the executive coaches agreed with the spirituality description, and 43.2% agreed that spirituality was an important outcome of executive coaching. However, Peterson's (2016) results were significantly different: 96.2% of CCCU presidents agreed with both the spirituality description and that spirituality was an important outcome of presidential leadership.

The disparity in these results supported Livingston's (2012) assertion that the answers to questions regarding spirituality are determined by the participants' worldview. Sire (2004) called worldview a "fundamental orientation of the heart," and "the

foundation on which we live" (p. 161). In fact, one participant leader in the present study stated, "I would need to change my entire world view on religion and spirituality." The fundamental ontological framework underpinning worldview is evidenced by the vehemence of some of the comments:

- "Mixing religion and business wisdom—seriously? What are you driving at? We don't work for a cult."

- "Get with the program buddy. Its [sic] business not church. Leave private life out of it."

The questionnaire asked the participant leaders to rate their agreement with spirituality as a component of wisdom; spirituality was not advocated beyond being listed as a possible component of wisdom. Also of note, the term *spirituality* had no specificity; no specific deity, faith, or even formal religion was expressed or implied. However, 26 of the comments received for this construct conflated spirituality and religion, several of which seemed to indicate offense by the concept.

In both the present study and in Livingston's (2012) study, participants were from around the globe. The geographic range in the participant groups generated a complex level of diversity when considering the spirituality of leaders. In Peterson's (2016) research, all of the participant presidents worked in the United States and, more importantly, for Christian colleges; therefore, the differences in the responses to spirituality between Christian college presidents and secular business people were not surprising. However, while all of the other construct responses varied slightly, they were comparable. The extreme variance in the responses to the spirituality construct may merit a closer look in future research.

Implications for Practice

The 375 participant organizational leaders showed significant agreement regarding the individual constructs of wisdom. The leaders also indicated a strong agreement regarding the definition of wisdom and the importance of developing wisdom in organizational leaders. These results built on the work done by Livingston (2012) and Peterson (2016) and further validated the WBLM as a resource for the development of wisdom.

The literature is clear on the increasing need for wisdom in leadership (Kaipa, 2014; Küpers, 2007; McKenna et al., 2009), yet competing and conflicting definitions of wisdom are still prevalent, with none that are universally accepted (Ardelt, 2003; Jeste et al., 2010). The WBLM can be used to address both of these concerns. The leaders in this study agreed with the WBLM definition of wisdom as applied to organizational leadership. Once organizational leaders reached agreement, then each of the WBLM constructs can be considered points for wisdom development.

One of the key benefits of the WBLM is the focus on wise action as related to organizational leadership (Ludden, 2015). The organizational leaders showed the importance of action through their responses to the action stage constructs of authenticity, courage, and collaboration. The relationship between the three constructs of the action stage was the strongest found in the study. Ludden (2015) explained that the action stage of the WBLM separated it from mere thoughts or speculations on wisdom.

The results of this research could be viewed as the first step toward building a wisdom development program within this organization, using the WBLM as a foundation. Because organizational leaders agreed with the WBLM definition of

wisdom, the WBLM constructs could be considered developmental goals on the path to wisdom. Moreover, the organizational leaders showed strong agreement in taking wise action through authenticity, courage, and collaboration.

Limitations

This study measured the perceptions of organizational leaders on wisdom as presented by the WBLM and had a number of limiting factors. First, this study was conducted within a single organization. While this organization does have diverse business interests and global operations, the conclusions of the study were limited in the potential to generalize the results to those working in other organizations.

Second, the survey method was limited in its ability to assess leaders' attitudes (Leedy & Ormrod, 2010). The qualitative feedback option was added to mediate that limitation, but the success of the mediation is impossible to gauge. In addition, the possibility of response fatigue with the qualitative questions was increased. Sixty-six leaders began the survey and did not finish. However, the final required question, regarding additional wisdom concepts, received 210 qualitative responses, which indicated that response fatigue was not a major factor.

Third, the word *outcome* seemed to confound some of the participant leaders. For each of the statements regarding WBLM constructs as important outcomes of leadership, there were several leaders made qualitative statements were that the given construct was an input or precursor to leadership. Based on the comments, several of the leaders agreed with the importance of the constructs but not on the wording of the statement. Clarifying the statements could have resulted in stronger agreement for all of the leadership outcome statements.

Suggestions for Future Research

This research was the third to use the WBLM to measure perceptions of wisdom, following after the work of Livingston (2012) and Peterson (2016). Each study had strong participant agreement in the WBLM components of wisdom and in the importance of wisdom development. Given the research conducted with the WBLM, the following are suggestions for future research.

First, the agreement by executive coaches (Livingston, 2012), CCCU presidents (Peterson, 2016), and organizational leaders in the present study is strong support for the continued use of the WBLM as a model for the study of wisdom in leadership. Continuing to test this model with other research populations would be useful.

Second, as noted in the vastly different spirituality responses between the Christian and secular populations in these studies, exploring how culture affected the responses to the WBLM would be interesting. If, as surmised, the response to the spirituality component is predicated on a leader's worldview, how strongly is that worldview affected by culture? Can the spirituality construct be reframed in a way that retains the meaning yet invokes a less visceral response from those who disagree?

Third, in testing for hypothesis two, both Livingston (2012) and Peterson (2016) found that weak correlations between variables of a construct indicated no relationship. Livingston was unable to reject null hypothesis two. The present study showed weak but statistically significant relationships in six of 18 instances. While these results allowed for the rejection of the null hypothesis, further research could be conducted to determine how the inter-construct and intra-construct correlations can be strengthened.

Fourth, the concepts that the leaders thought were essential to a clear understanding of wisdom would be interesting to explore. Yang (2008) suggested that wisdom be defined more broadly. Perhaps some of these concepts can be integrated into the WBLM to gain even stronger agreement by organizational leaders in future studies.

Finally, these three studies using the WBLM have set a baseline, a starting point. While it is good to know that the WBLM is a valid model and that different research populations agree with it, the really valuable work has yet to be done. The WBLM should be used as a basis for wisdom development in leaders. After all, "leadership requires wisdom to provide excellence in judgment, insight and character, and … if the principle features of wisdom are understood, leaders can be evaluated according to a robust criteria based on these principles" (McKenna et al., 2009, p. 177). The goal of any study of leadership wisdom must ultimately be the development of wise leaders.

Final Summary

Three hundred and seventy-five leaders from a single global organization expressed their perceptions on the 10 fundamental constructs that comprise the Wisdom-Based Leadership Model: knowledge, experience, community, critical thinking, reflection, deliberation, integrity, courage, collaboration, and spirituality (Ludden, 2009). These leaders showed significant agreement that the WBLM accurately captured the essence of wisdom and that wisdom development is important for organizational leaders.

REFERENCES

Ardelt, M. (1997). Wisdom and life satisfaction in old age. *Journals of Gerontology Series B: Psychological Sciences & Social Sciences, 52B*(1), 15–27.

Ardelt, M. (2000). Intellectual versus wisdom-related knowledge: The case for a different kind of learning in the later years of life. *Educational Gerontology, 26*(8), 771–789. http://dx.doi.org/10.1080/036012700300001421

Ardelt, M. (2003). Empirical assessment of a three-dimensional wisdom scale. *Research on Aging, 25*(3), 275–324.

Ardelt, M. (2004a). Where can wisdom be found? *Human Development, 47*(5), 304–307. http://dx.doi.org/10.1159/000079158

Ardelt, M. (2004b). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development, 47*(5), 257–285. http://dx.doi.org/10.1159/000079154

Aristotle. (trans. 2006). *Book one: Metaphysics* (D. Ross, Trans.). Stilwell, KS: Digireads.com Publishing. (Original work published ca. 350 B.C.).

Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology, 81*(2), 199–214.

Assmann, A. (1994). Wholesome knowledge: Concepts of wisdom in a historical and cross-cultural perspective. In D. L. Featherman, R. M. Lerner & M. Perlmutter (Eds.), *Life-span development and behavior* (Vol. 12, pp. 187–224). Hillsdale, NJ: Lawrence Erlbaum Associates.

Baltes, P. B., & Kunzmann, U. (2004). The two faces of wisdom: Wisdom as a general theory of knowledge and judgment about excellence in mind and virtue vs.

wisdom as everyday realization in people and products. *Human Development,*
47(5), 290–299. http://dx.doi.org/10.1159/000079156

Baltes, P. B., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In
R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 87–120).
Cambridge, England: Cambridge University Press.

Baltes, P. B., & Smith, J. (2008). The fascination of wisdom: Its nature, ontogeny, and
function. *Perspectives on Psychological Science, 3*(1), 56–64.
http://dx.doi.org/10.1111/j.1745-6916.2008.00062.x

Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom.
Current Directions in Psychological Science, 2(3), 75–80.
http://dx.doi.org/10.1111/1467-8721.ep10770914

Baltes, P. B., & Staudinger, U. M. (2000). Wisdom. *American Psychologist, 55*(1), 122–
136.

Bandura, A. (2003). On the psychosocial impact and mechanisms of spiritual modeling.
International Journal for the Psychology of Religion, 13(3), 167–17.

Bangen, K. J., Meeks, T. W., & Jeste, D. V. (2013). Defining and assessing wisdom: A
review of the literature. *American Journal of Geriatric Psychiatry, 21*(12), 1254–
1266. http://dx.doi.org/10.1016/j.jagp.2012.11.020

Bass, B. M., & Bass, R. (2008). *The Bass handbook of leadership: Theory, research and*
managerial applications (4th ed.). New York, NY: Free Press.

Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Thousand Oaks, CA:
SAGE.

Bennett, N., & Lemoine, G. J. (2014a). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons, 57*, 311–317. http://dx.doi.org/10.1016/j.bushor.2014.01.001

Bennett, N., & Lemoine, G. J. (2014b). What VUCA really means for you. *Harvard Business Review, 92*(1/2), 27–27.

Bennis, W. G. (2004). The seven ages of the leader. *Harvard Business Review, 82*(1), 46–53.

Birren, J., & Fisher, L. (1990). The elements of wisdom: Overview and integration. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 317–332). Cambridge, England: Cambridge University Press.

Blockley, D. (2015). Finding resilience through practical wisdom. *Civil Engineering and Environmental Systems, 32*(1-2), 18–30. http://dx.doi.org/10.1080/10286608.2015.1022725

Boyatis, R. E., Smith, M. L., & Blaize, N. (2006). Developing sustainable leaders through coaching and compassion. *Academy of Management Learning & Education, 5*(1), 1–41.

Bradburn, N., Sudman, S., & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design*. San Francisco, CA: Jossey-Bass.

Branick, V. P. (2006). Wisdom, pessimism, and "mirth": Reflections on the contribution of biblical wisdom literature to business ethics. *Journal of Religious Ethics, 34*(1), 69–87. http://dx.doi.org/10.1111/j.1467-9795.2006.00256.x

Brinkerhoff, D. B., White, L. K., Ortega, S. T., & Weitz, R. (2008). *Essentials of Sociology* (7th ed.). Belmont, CA: Thompson Wadsworth.

Bryman, A. (2008). *Social research methods* (3rd ed.). Oxford, England: Oxford
University Press.

Buzzell, S., Boa, K., & Perkins, B. (Eds.). (1998). *The leadership bible*. Grand Rapids,
MI: Zondervan.

Callahan, C. (2009). Resonance, dissonance, and leadership. *U.S. Army Medical
Department Journal*, 32–36.

Case, P., & Gosling, J. (2007). Wisdom of the moment: Pre-modern perspectives on
organizational action. *Social Epistemology, 21*(2), 87–111.
http://dx.doi.org/10.1080/02691720701393426

Chapa, O., & Stringer, D. (2013). The path of measuring moral courage in the workplace.
SAM Advanced Management Journal, 78(2), 17–50.

Ciulla, J. B. (2005). The state of leadership ethics and the work that lies before us.
Business Ethics: A European Review, 14(4), 323–335.
http://dx.doi.org/10.1111/j.1467-8608.2005.00414.x

Cronk, B. C. (2008). *How to use SPSS: A step-by-step guide to analysis and
interpretation* (5th ed.). Glendale, CA: Pyrczak.

Descartes, R. (1637). *A discourse on method*. Retrieved from https://www.gutenberg.org/

Dotlich, D. L., & Cairo, P. C. (2003). *Why CEOs fail: The 11 behaviors that can derail
your climb to the top—and how to manage them*. Hoboken, NJ: John Wiley &
Sons.

Drucker, P. F. (2005). Managing oneself. *Harvard Business Review, 83*(1), 100–109.

Duncan, R., & Weiss, A. (1979). Organizational learning: Implications for organizational
design. *Research in Organizational Behavior, 1*, 75–123.

Dunham, L. (2010). From rational to wise action: Recasting our theories of
   entrepreneurship. *Journal of Business Ethics, 92*(4), 513–530.
   http://dx.doi.org/10.1007/s10551-009-0170-5

Edmondson, R. (2005). Wisdom in later life: Ethnographic approaches. *Ageing &
   Society, 25*(3), 339–356. http://dx.doi.org/10.1017/s0144686x04003320

Ferrari, M., Weststrate, N., & Petro, A. (2013). Stories of wisdom to live by: Developing
   wisdom in a narrative mode. In M. Ferrari & N. Weststrate (Eds.), *The scientific
   study of personal wisdom* (pp. 137–164). Dordrecht, The Netherlands: Springer
   Science+Business Media.

Finkelstein, S. (2003). Seven habits of spectacularly unsuccessful people. *Business
   Strategy Review, 14*(4), 39–50. http://dx.doi.org/10.1111/j.2003.00285.x

Fischer, A. (2015). Wisdom: The answer to all questions really worth asking.
   International Journal of Humanities and Social Science, 5(9), 73–83.

Fowler, F. J. J. (2009). *Survey reseach methods*. Thousand Oaks, CA: SAGE.

Freed, J. (2011). In search of wisdom from leadership sages. *Interbeing, 5*(2), 1–8.

García-Marzá, D. (2005). Trust and dialogue: Theoretical approaches to ethics auditing.
   Journal of Business Ethics, 57(3), 209–219. http://dx.doi.org/10.1007/s10551-
   004-8202-7

Gibson, P. S. (2008). Developing practical management wisdom. *Journal of Management
   Development, 27*(5), 528–536. http://dx.doi.org/10.1108/02621710810871835

Groebner, D. F., Shannon, P. W., Fry, P. C., & Smith, K. D. (2011). *Business statistics: A
   decision making approach* (8th ed.). Upper Saddle River, NJ: Pearson.

Gygax, M., & Fitzgerald, S. P. (2011). Enriching the positive organizational behavior framework with wisdom. *International Journal of Business Research, 11*(2), 23–41.

Hammel, B. (2008). *The Bill Cook story: Ready, fire, aim.* Bloomington, IN: Indiana University Press.

Hays, J. M. (2007). Dynamics of organizational wisdom. *Business Renaissance Quarterly, 2*(4), 77–122.

Hira, F. J., & Faulkender, P. J. (1997). Perceiving wisdom: Do age and gender play a part? *International Journal of Aging & Human Development, 44*(2), 85–101.

Holliday, G., Statler, M., & Flanders, M. (2007). Developing practically wise leaders through serious play. *Consulting Psychology Journal: Practice & Research, 59*(2), 126–134. http://dx.doi.org/10.1037/1065-9293.59.2.126

Howard, L. W., Tang, T. L.–P., & Austin, M. J. (2015). Teaching critical thinking skills: Ability, motivation, intervention, and the Pygmalion effect. *Journal of Business Ethics, 128*(1), 133–147. http://dx.doi.org/10.1007/s10551-014-2084-0

Intezari, A., & Pauleen, D. J. (2014). Management wisdom in perspective: Are you virtuous enough to succeed in volatile times? *Journal of Business Ethics, 120*(3), 393–404. http://dx.doi.org/10.1007/s10551-013-1666-6

Jeste, D. V., Ardelt, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert consensus on characteristics of wisdom: A Delphi method study. *Gerontologist, 50*(5), 668–680. http://dx.doi.org/10.1093/geront/gnq022

Jones, C. A. (2005). Wisdom paradigms for the enhancement of ethical and profitable business practices. *Journal of Business Ethics, 57*(4), 363–375. http://dx.doi.org/10. 1007/s10551-004-4602-y

Kaipa, P. (2014). Making wise decisions: Leadership lessons from Mahabharata. *Journal of Management Development, 33*(8/9), 835–846. http://dx.doi.org/10.1108/jmd-06-2014-0061

Kallio, E. (2015). From causal thinking to wisdom and spirituality: Some perspectives on a growing research field in adult (cognitive) development. *Approaching Religion, 5*(2), 27–41.

Keller, D. K. (2006). *The tao of statistics: A path to understanding (with no math)*. Thousand Oaks, CA: SAGE.

Kessler, E. H., & Bailey, J. R. (Eds.). (2007a). *Handbook of organizational and managerial wisdom*. Thousand Oaks, CA: SAGE.

Kessler, E. H., & Bailey, J. R. (2007b). Understanding, applying, and developing organizational and managerial wisdom. In E. H. Kessler & J. R. Bailey (Eds.), *Handbook of organizational and managerial wisdom* (pp. xv–lxxiv). Thousand Oaks, CA: SAGE.

Khan, M. W., & Altaf, M. (2015). Use of practical wisdom through human capital in enhancing organizational innovativeness. *Journal of Business and Management Research, 9*, 261–269.

Kilburg, R. R. (2006). *Executive Wisdom*. Washington, DC: American Psychological Association.

Kohlberg, L., & Hersh, R. H. (1977). Moral development: A review of the theory. *Theory into Practice, 16*(2), 53–59.

Kouzes, J. M., & Posner, B. Z. (2007). *The leadership challenge* (4th ed.). San Francisco, CA: Jossey-Bass.

Krathwohl, D. R., & Smith, N. L. (2005). *How to prepare a dissertation proposal: Suggestions for students in education & the social and behavioral sciences*. Syracuse, NY: Syracuse University Press.

Küpers, W. M. (2007). Phenomenology and integral pheno-practice of wisdom in leadership and organization. *Social Epistemology, 21*(2), 169–193. http://dx.doi.org/10.1080/02691720701393509

Küpers, W. M., & Pauleen, D. (2015). Learning wisdom: Embodied and artful approaches to management education. *Scandinavian Journal of Management, 31*(4), 493–500. http://dx.doi.org/10.1016/j.scaman.2015.08.003

Küpers, W. M., & Pauleen, D. (2016). *A handbook of practical wisdom: Leadership, organization and integral business practice*. Abingdon, England: Routledge.

Küpers, W. M., & Statler, M. (2008). Practically wise leadership: Toward an integral understanding. *Culture & Organization, 14*(4), 379–400. http:dx.doi.org/10.1080/14759550802489771

Leedy, P. D., & Ormrod, J. E. (2010). *Practical research: Planning and design* (9th ed.). Upper Saddle River, NJ: Pearson.

Livingston, S. (2012). *Perceptions of executive coaches about wisdom in organizational leaders* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3509698)

Ludden, V. (2009). *Wisdom model for leaders*. Unpublished manuscript, Department of Organizational Leadership, Indiana Wesleyan University. Marion, IN.

Ludden, V. (2013). *Wisdom model for leaders*. Unpublished manuscript, Department of Organizational Leadership, Indiana Wesleyan University. Marion, IN.

Ludden, V. (2015). *Wisdom-based leadership: A model for leadership training and development*. Paper presented at the 2015 Academy of Human Resource Development International Research Conference in the Americas, St. Louis, MO.

McKenna, B., Rooney, D., & Boal, K. B. (2009). Wisdom principles as a meta-theoretical basis for evaluating leadership. *The Leadership Quarterly, 20*, 177–190.

McKenna, B., Rooney, D., & Liesch, P. (2006). Beyond knowledge to wisdom in international business strategy. *Prometheus, 24*(3), 283–300. http://dx.doi.org/10.1080/08109020600877576

Meacham, J. A. (1990). The loss of wisdom. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 181–211). Cambridge, England: Cambridge University Press.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: SAGE.

Moberg, D. (2008). Mentoring and practical wisdom: Are mentors wiser or just more politically skilled?*Journal of Business Ethics, 83*(4), 835–843. http://dx.doi.org/10.1007/s10551-008-9668-5

Nonaka, I., & Takeuchi, H. (2011). The wise leader. *Harvard Business Review*, *89*(5) 58–67.

Pasupathi, M., Staudinger, U. M., & Baltes, P. B. (2001). Seeds of wisdom: Adolescent's knowledge and judgement about difficult life problems. *Developmental Psychology, 37*(3), 351–361.

Peterson, S. (2016). *An understanding of wisdom within CCCU presidents* (Doctoral dissertation). Indiana Wesleyan University, Marion, IN.

Plato. (trans. 1992). *The republic*. Indianapolis, IN: Hackett Publishing Company Incorporated. (Original work published ca. 370 B.C.).

Provis, C. (2010). Virtuous decision making for business ethics. *Journal of Business Ethics, 91*, 3–16. http://dx.doi.org/10.1007/s10551-010-0564-4

Raelin, J. A. (2002). "I don't have time to think!" versus the art of reflective practice. *Reflections, 4*(1), 66–79.

Raelin, J. A. (2007). Toward an epistemology of practice. *Academy of Management Learning & Education, 6*(4), 495–519.

Roca, E. (2007). Intuitive practical wisdom in organizational life. *Social Epistemology, 21*(2), 195–207. http://dx.doi.org/10.1080/02691720701393517

Roca, E. (2008). Introducing practical wisdom in business schools. *Journal of Business Ethics, 82*(3), 607–620. http://dx.doi.org/10.1007/s10551-007-9580-4

Rouse, B. A., Kozel, N. J., & Richards, L. G. (Eds.). (1985). *Self-report methods of estimating drug use: Meeting current challenges to validity*. Rockville, MD: U. S. Department of Health and Human Services.

Schwartz, B., & Sharpe, K. E. (2006). Practical wisdom: Aristotle meets positive psychology. *Journal of Happiness Studies, 7*, 377–395. http://dx.doi.org/10.1007/s10902-005-3651-y

Schwartz, B., & Sharpe, K. E. (2010). *Practical wisdom: The right way to do the right thing*. New York, NY: Penguin.

Scriven, M., & Paul, R. (1987). *Critical thinking as defined by the National Council for Excellence in Critical Thinking*. Paper presented at the 8th Annual International Conference on Critical Thinking and Education Reform, Rohnert Park, CA.

Shilcutt, K. (2015). Andrew Fastow plots and afterlife: The former Enron CFO's apology tour comes to Houston. *Houstonia*. Retrieved from https://www.houstoniamag.com

Shotter, J., & Tsoukas, H. (2014). In search of phronesis: Leadership and the art of judgment. *Academy of Management Learning & Education, 13*(2), 224–243. http://dx.doi.org/10.5465/amle.2013.0201

Simmel, G. (1978). *The philosophy of money* (T. Bottomore & D. Frisby, Trans.). London England: Routledge & K Paul.

Sire, J. W. (2004). *Naming the elephant: Worldview as a concept*. Downers Grove, IL: InterVarsity Press.

Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/cohort differences in response to life-planning problems. *Developmental Psychology, 26*(3), 494–505. http://dx.doi.org/10.1037/0012-1649.26.3.494

Solansky, S. T. (2014). To fear foolishness for the sake of wisdom: A message to leaders. *Journal of Business Ethics, 122*, 39–51. http://dx.doi.org/10.1007/s10551-013-1752-9

Staudinger, U. M., & Baltes, P. B. (1996). Interactive minds: A facilitative setting of wisdom-related performance? *Journal of Personality & Social Psychology, 71*(4), 746–762.

Staudinger, U. M., & Gluck, J. (2011). Pyschological wisdom research: Commonalities and differences in a growing field. *Annual Review of Pyschology, 62*, 215–241. http://dx.doi.org/10.1146/annurev.pysch.121208.131659

Staudinger, U. M., Maciel, A. G., Smith, J., & Baltes, P. B. (1998). What predicts wisdom-related performance? A first look at personality, intelligence, and facilitative experiential contexts. *European Journal of Personality, 12*(1), 1–17.

Sternberg, R. J. (1998). A balance theory of wisdom. *Review of General Psychology, 2*(4), 347–365. http://dx.doi.org/10.1037/1089-2680.2.4.347

Sternberg, R. J. (2003). WICS: A model of leadership in organizations. *Academy of Management Learning & Education, 2*(4), 386–401. http://dx.doi.org/10.5465/amle.2003.11902088

Sternberg, R. J. (2004a). Why smart people can be so foolish. *European Psychologist, 9*(3), 145–150. http://dx.doi.org/10.1027/1016-9040.9.3.145

Sternberg, R. J. (2004b). Words to the wise about wisdom? *Human Development, 47*(5), 286–289. http://dx.doi.org/10.1159/000079155

Sternberg, R. J. (2005a). A model of educational leadership: Wisdom, intelligence, and creativity, synthesized. *International Journal of Leadership in Education, 8*(4), 347–364. http://dx.doi.org/10.1080/13603120500156088

Sternberg, R. J. (2005b). Older but not wiser? The relationship between age and wisdom. *Ageing International, 30*(1), 5–26. http://dx.doi.org/10.1007/BF02681005

Sternberg, R. J. (2005c). WICS: A model of positive educational leadership comprising wisdom, intelligence, and creativity synthesized. *Educational Psychology Review, 17*(3), 191–262. http://dx.doi.org/10.1007/s10648-005-5617-2

Sternberg, R. J. (2007a). Assessing what matters. *Educational Leadership, 65*(4), 20–26.

Sternberg, R. J. (2007b). A systems model of leadership. *American Psychologist, 62*(1), 34–42. http://dx.doi.org/10.1037/0003-066x.62.1.34

Sternberg, R. J. (2008a). A new approach to leadership: WICS. *Baltic Journal of Psychology, 9*(1/2), 6–29.

Sternberg, R. J. (2008b). The WICS approach to leadership: Stories of leadership and the structures and processes that support them. *Leadership Quarterly, 19*(3), 360–371. http://dx.doi.org.10.1016/j.leaqua.2008.03.008

Sternberg, R. J. (2009). Wisdom, intelligence, and creativity synthesized: A new model for liberal education. *Liberal Education, 95*(4), 10–15.

Sternberg, R. J. (2015). Still searching for the Zipperump-a-Zoo: A reflection after 40 years. *Child Development Perspectives, 9*(2), 106–110. http://dx.doi.org/10.1111/cdep.12113

Swartwood, J. D. (2012). Wisdom as an expert skill. *Ethical Theory and Moral Practice, 16*(3), 511–528. http://dx.doi.org/10.1007/s10677-012-9367-2

Takahashi, M. (2000). Toward a culturally inclusive understanding of wisdom: Historical roots in the East and West. *International Journal of Aging & Human Development, 51*(3), 217–230.

Trowbridge, R. H., & Ferrari, M. (2011). Sophia and Phronesis in psychology, philosophy, and traditional wisdom. *Research in Human Development, 8*(2), 89–94. http;//dx.doi.org/10.1080/15427609.2011.568847

U. S. Department of Justice (2012, July, 2). GlaxoSmithKline to plead guilty and pay $3 billion to resolve fraud allegations and failure to report safety data. Retrieved from https://www.justice.gov/opa/pr/glaxosmithkline-plead-guilty-and-pay-3-billion-resolve-fraud-allegations-and-failure-report

U. S. Department of Justice (2016, March, 1). Medical equipment company will pay $646 million for making illegal payments to doctors and hospitals in United States and Latin America. Retrieved from https://www.justice.gov/opa/pr/medical-equipment-company-will-pay-646-million-making-illegal-payments-doctors-and-hospitals

Useem, J. (2016 Jan/Feb). What was Volkswagen thinking? *The Atlantic,* Retrieved from https://www.theatlantic.com/magazine/archive/2016/01/what-was-volkswagen-thinking/419127/

Volkswagen. (2016). VW diesel info. Retrieved from https://www.vwcourtsettlement.com

Webster, J. D. (2003). An exploratory analysis of a self-assessed wisdom scale. *Journal of Adult Development, 10*(1), 13.

Webster, J. D. (2007). Measuring the character strength of wisdom. *International Journal of Aging & Human Development, 65*(2), 163–183.

Weick, K. E., & Ashford, S. J. (2000). Learning in organizations. In F. M. Jablin & L. L. Putnam (Eds.), *The new handbook of organizational communication: Advances in theory, research, and methods* (pp. 704–731). Thousand Oaks, CA: SAGE.

Yang, S.–Y. (2008). A process view of wisdom. *Journal of Adult Development, 15*(2), 62–75. http://dx.doi.org/10.1007/s10804-008-9037-8

Yang, S.–Y. (2011). Wisdom displayed through leadership: Exploring leadership-related wisdom. *Leadership Quarterly, 22*(4), 616–632. http://dx.doi.org/10.1016/j.leaqua.2011.05.004

Yang, S.–Y. (2013). From personal striving to positive influence: Exploring wisdom in real-life contexts. In M. Ferrari & N. Weststrate (Eds.), *The scientific study of personal wisdom* (pp. 115–135). Dordrecht: Springer Science+Business Media.

Yang, S.–Y. (2014). Wisdom and learning from important and meaningful life experiences. *Journal of Adult Development, 21*(3), 129–146. http://dx.doi.org/10.1007/s10804-014-9186-x

Zacher, H., McKenna, B., Rooney, D., & Gold, S. (2015). Wisdom in the military context. *Military Psychology, 27*(3), 142–154. http://dx.doi.org/10.1037/mil0000070

Zacher, H., Pearce, L. K., Rooney, D., & McKenna, B. (2014). Leaders' personal wisdom and leader–member exchange quality: The role of individualized consideration. *Journal of Business Ethics, 121*(2), 171–187. http://dx.doi.org/10.1007/s10551-013-1692-4

Appendix A—The Questionnaire

Thank you for participating in this survey. As a leader within the organization your opinions are very important to this research. This survey asks for your responses to 11 distinct conceptual descriptions regarding the construct of wisdom in organizational leaders and should take you about 20 minutes to complete.

I am currently a doctoral candidate at Indiana Wesleyan University. The purpose of this survey is to collect data for my dissertation. Surveys submitted over the next 30 days will be compiled and analyzed for statistical relationships. The findings of this survey will contribute to the development of a model that can be utilized in the development of wisdom in organizational leaders.

Your responses to this survey will remain anonymous. You may stop the survey at any time without penalty or harm to you.

You will only have one chance to start and finish this survey. Once you have begun the survey will take approximately 20 minutes for you to complete. Thank you in advance for your time and willingness to participate in this research.

1. Your participation in the survey indicates your understanding and acceptance of the following statements:

   a. I understand that the goal of this research is to measure my perception of wisdom.

   b. I agree to complete this survey through SurveyMonkey.

   c. I understand that this survey will take approximately 20 minutes to complete.

   d. I understand that the risk to me in participating in this survey is minimal, similar to that of everyday life.

   e. I acknowledge that participation in this study may not have a direct benefit to me.

   f. I understand that the survey is designed not to collect e-mail addresses or Internet protocol (IP) addresses. To further maintain confidentiality of the survey, I should not include my name or any other information by which I can be identified in any of the comment boxes in the survey. Aggregate data will be shared with the organization. Data will be securely retained by the researcher for a period of three years before being destroyed.

   g. I do not have to participate in this research project. If I agree to participate I can withdraw my participation at any time without penalty. I can choose not to participate in the survey with no risk to my employment.

   h. I participate of my own accord in this research project and release any claim to the collected data, research results, publication in any form including thesis/dissertation, journal article, conference presentation or commercial use of such information or products resulting from the collected information.

( )Agree   ( )Disagree   (If participant disagrees, they are unable to continue)

2. This survey asks demographic questions about you and your leadership experience.

a. How many years of leadership experience do you have? _____

b. Do you currently have at least one person who reports to you?

　　　　　　( ) Yes　　　　　　( ) No

c. How many people report to you? _____

d. How many years have you been in your current leadership position? _____

e. Type of organization you work for:

　　　　( ) Medical manufacturing (Devices, Pharma, Biomedical, etc.)

　　　　( ) Raw material manufacturing

　　　　( ) Research

　　　　( ) Hospitality (hotel, casino, travel)

　　　　( ) Financial services

　　　　( ) Other (Aviation, Clinic, etc.)

f. What is your gender?　　( )Male　　( )Female　　( )Prefer not to answer

g. What is your age? _____

h. What is your ethnicity?

( ) White　　　　　　　　　　　　( ) Black, African American, or Negro

( ) American Indian or Alaska Native　　( ) Asian

( ) Other Race　　　　　　　　( )Prefer not to Answer

i. What is the highest level of education you've completed?

( ) Less than a Bachelor's Degree　　　　( ) Associate Degree

( ) Bachelor's Degree　　　　　　( ) Master's Degree

( ) Professional Degree (M.D., J.D., O.D., etc.)

( ) Doctorate (Ph.D., Ed.D., etc.)

j. What is your country of citizenship? _____

k. In what country do you currently work? _____

For the next group of questions you will be asked to read descriptions of constructs that attempts to describe wisdom in organizational leaders. You are to answer your level of agreement with the statement using a 7-point Likert scale. You will click on one response for each item.

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree
○	○	○	○	○	○	○

(Note. This survey contains skip logic. Depending on how the participant answers the question they will be taken to the appropriate point in the survey. For example, if the participant answers 3, 4, 5, or 6 on the Likert Scale then he/she continues to the next quantitative Likert scale question. If participant answers less than a 3 he/she will be directed to a qualitative question. After answering the qualitative question the participant is taken back to the next quantitative Likert scale question in the survey.)

Description 1: As it pertains to developing wisdom in organizational leaders; Knowledge is acquired in formal and non-formal learning environments and is balanced with knowledge about the organization.

1a. This description of knowledge expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

1b. Knowledge is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

1c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Knowledge is acquired in formal and non-formal learning environments and balanced with knowledge about the organization.

1d. What would you change that would allow you to Strongly Agree with the statement: Knowledge is a concept that is an important outcome of organizational leadership.

Description 2: As it pertains to developing wisdom in organizational leaders; Experience is acquired through interaction with things, activities, media, events, organizations, institutions, and society.

2a. This description of experience expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

2b. Experience is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

2c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Experience is acquired through interaction with things, activities, media, events, organizations, institutions, and society.

2d. What would you change that would allow you to Strongly Agree with the statement: Experience is a concept that is an important outcome of organizational leadership.

Description 3: As it pertains to developing wisdom in organizational leaders; Community is ideas, thoughts, values, morals, and knowledge acquired from our family, friends, neighbors, fellow students, coworkers, civic groups, religious groups, and culture.

3a. This description of community expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

3b. Community is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

3c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Community is ideas, thoughts, values, morals, and knowledge acquired from our family, friends, neighbors, fellow students, coworkers, civic groups, religious groups, and culture.

3d. What would you change that would allow you to Strongly Agree with the statement: Community is a concept that is an important outcome of organizational leadership.

Description 4: As it pertains to developing wisdom in organizational leaders; Critical

thinking is using cognitive skills that include remembering, understanding, applying,

analyzing, synthesizing, evaluating, and creating.

4a. This description of critical thinking expresses a concept that is essential to developing

wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

4b. Critical thinking is a concept that is an important outcome of organizational

leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

4c. What would you change that would allow you to Strongly Agree with the description:

As it pertains to developing wisdom in organizational leaders; Critical Thinking is using

cognitive skills that include remembering, understanding, applying, analyzing,

synthesizing, evaluating, and creating.

4d. What would you change that would allow you to Strongly Agree with the statement:

Critical Thinking is a concept that is an important outcome of organizational leadership.

Description 5: As it pertains to developing wisdom in organizational leaders; Reflection is sensemaking of a person's interaction with things, activities, media, events, organizations, institutions, and society.

5a. This description of reflection expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

5b. Reflection is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

5c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Reflection is sensemaking of a person's interaction with things, activities, media, events, organizations, institutions, and society.

5d. What would you change that would allow you to Strongly Agree with the statement: Reflection is a concept that is an important outcome of organizational leadership.

Description 6: As it pertains to developing wisdom in organizational leaders; Deliberation is engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and prepare for implementing action.

6a. This description of deliberation expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

6b. Deliberation is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

6c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Deliberation is engaging with others to consider ideas, thoughts, information, knowledge, and experiences in order to make decisions and prepare for implementing action.

6d. What would you change that would allow you to Strongly Agree with the statement: Deliberation is a concept that is an important outcome of organizational leadership.

Description 7: As it pertains to developing wisdom in organizational leaders; Authenticity is understanding the worldview, values, ethics, and morals that are an essential part of a person and acting in accordance with these integral elements of oneself.

7a. This description of authenticity expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

7b. Authenticity is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

7c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Authenticity is understanding the worldview, values, ethics, and morals that are an essential part of a person and acting in accordance with these integral elements of oneself.

7d. What would you change that would allow you to Strongly Agree with the statement: Authenticity is a concept that is an important outcome of organizational leadership.

Description 8: As it pertains to developing wisdom in organizational leaders; Courage is fortitude to carry out those actions and decisions one knows to be right despite opposition or the potential for failure.

8a. This description of courage expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

8b. Courage is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

8c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Courage is fortitude to carry out those actions and decisions one knows to be right despite opposition or the potential for failure.

8d. What would you change that would allow you to Strongly Agree with the statement: Courage is a concept that is an important outcome of organizational leadership.

Description 9: As it pertains to developing wisdom in organizational leaders; Collaboration is acting within the context of one's meaning and/or purpose in life in a way that enables others to do the same while striving together to achieve the purpose of the organization.

9a. This description of collaboration expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

9b. Collaboration is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

9c. What would you change that would allow you to Strongly Agree with the description: As it pertains to developing wisdom in organizational leaders; Collaboration is acting within the context of one's meaning and/or purpose in life in a way that enables others to do the same while striving together to achieve the purpose of the organization.

9d. What would you change that would allow you to Strongly Agree with the statement: Collaboration is a concept that is an important outcome of organizational leadership.

Description 10: As it pertains to developing wisdom in organizational leaders; most religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from a higher power or being. Continuous spiritual growth and formation that is planned and intentional is fundamental to acquiring and refining personal wisdom.

10a. This description of spiritual formation expresses a concept that is essential to developing wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

10b. Spiritual Formation is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

10c. What would you change that would allow you to Strongly Agree with the description:

As it pertains to developing wisdom in organizational leaders; most religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from a higher power or being. Continuous spiritual growth and formation that is planned and intentional is fundamental to acquiring and refining personal wisdom.

10d. What would you change that would allow you to Strongly Agree with the statement: Spiritual Formation is a concept that is an important outcome of organizational leadership.

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Description 11. As it pertains to developing wisdom in organizational leaders, wisdom is a dynamic process a leader uses to apply knowledge, experience, and virtue to seek truth that subsequently governs the leader's actions and decisions for the organization. Wisdom engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement. Wisdom is manifested by continuously seeking more knowledge, experience, and virtuosity to achieve these ends.

11a. This description of wisdom expresses a concept that is essential to developing in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

11b. Wisdom is a concept that is an important outcome of organizational leadership.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

11c. What would you change that would allow you to Strongly Agree with the description:

As it pertains to developing wisdom in organizational leaders, wisdom is a dynamic process a leader uses to apply knowledge, experience, and virtue to seek truth that subsequently governs the leader's actions and decisions for the organization. Wisdom engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement. Wisdom is manifested by continuously seeking more knowledge, experience, and virtuosity to achieve these ends.

11d. What would you change that would allow you to Strongly Agree with the statement: Wisdom is a concept that is an important outcome of organizational leadership.

12. Please review the constructs below that have been presented as essential to describing wisdom in organizational leaders: Knowledge, Experience, Community, Critical Thinking, Reflection, Deliberation, Authenticity, Courage, Collaboration, and Spirituality.

These constructs provide a good model of wisdom in organizational leaders.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

13. What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?

The following questions are optional. They are not part of this research study; however, they may be used in future research studies.

14. My work as an organizational leader involves developing wisdom in other members of the organization?

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Agree	Strongly Agree

15. What percent of your time would you estimate is spent on issues related to developing wisdom in organizational leaders? _____

16. What percent of your time would you estimate is spent helping a colleague to
improve the following constructs? (These reflect the 10 constructs of the Wisdom
Based Model for Leaders)

_____ Knowledge

_____ Experience

_____ Community

_____ Critical Thinking

_____ Reflection

_____ Deliberation

_____ Authenticity

_____ Courage

_____ Collaboration

_____ Spirituality

Appendix B—HR Introductory Email & Invitation to the WBLM Questionnaire

Our company is going through a lot of change and an important part of that transformation is developing new ways for our employees to grow and thrive [here].

On Monday, February 20th, Chad Schulenburg will send you an invitation to an online survey about your perceptions of wisdom. Chad is conducting wisdom research for his doctorate degree and has offered to share his research data with [our company]. This survey will take approximately 20 minutes of your time. I encourage you to complete it. Having a more complete understanding of how our leaders view wisdom could help us plan better for the future. We want to create relevant training, help employees grow, and develop future leadership.

This survey is not mandatory. There will be no harm to you for not completing it. If you do choose to participate, please know that your responses will be held in the highest confidence. The survey instrument will separate identifying information from your responses, ensuring anonymity.

The survey will open once you receive the invitation on Monday February 20th, 2017, and will close on Monday, March 6th, 2017. Have a great weekend.

[removed for confidentiality]

Director, Global Human Resources

Appendix C—Email Invitation Containing the Link to the WBLM Questionnaire

Greetings,

My name is Chad Schulenburg [removed for confidentiality]. Presently I am a candidate for a doctoral degree in organizational leadership at Indiana Wesleyan University with research focused on the perception of wisdom by business leaders.

Last week you received an email from [HR] regarding an invitation to the survey associated with this research. Below you will find the link to that survey. The survey is being administered through SurveyMonkey to ensure the confidentiality of your responses.

Survey Link: https://www.surveymonkey.com/r/wisdom_perceptions

The survey will take approximately 20 minutes of your time, and will remain available for completion until Monday March, 6th 2017. Please note that once the survey is begun it cannot be closed and reopened; the survey must be completed in one sitting. You may stop the survey at any time without penalty or harm to you.

Thank you in advance for your time and willingness to participate in this research.

Sincerely,
Chad Schulenburg

Appendix D—Email Reminder of Survey

Greetings,

Once again, let me say thank you for your willingness to share your perceptions of wisdom.

So far, 291 leaders from across [the organization] have shared their perceptions of wisdom. If you have not responded and are willing to share your perceptions of wisdom, the survey will remain open through Monday March 6th, 2017. The survey should take approximately 20 minutes to complete and your responses will remain confidential.

Again, thank you for your assistance and time. I deeply appreciate your willingness to participate.

Survey Link: https://www.surveymonkey.com/r/wisdom_perceptions

Sincerely,

Chad Schulenburg

Appendix E—Kolmogorov–Smirnov Test of Normality Construct

Null Hypothesis	Test	Significance	Decision
The distribution of Knowledge Description is normal with mean 6.02 and standard deviation 0.746.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Experience Description is normal with mean 5.96 and standard deviation 0.914.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Community Description is normal with mean 5.76 and standard deviation 0.971.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Critical Thinking Description is normal with mean 6.34 and standard deviation 0.720.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Reflection Description is normal with mean 5.90 and standard deviation 0.930.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Deliberation Description is normal with mean 6.22 and standard deviation 0.827.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Authenticity Description is normal with mean 5.84 and standard deviation 1.090.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Courage Description is normal with mean 6.17 and standard deviation 0.934.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Collaboration Description is normal with mean 6.02 and standard deviation 0.998.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Spirituality Description is normal with mean 4.49 and standard deviation 1.620.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Wisdom Description is normal with mean 5.95 and standard deviation 0.912.	One-Sample Kolmogorov–Smirnov Test	0.000	Reject the Null Hypothesis

Note. A one-sample Kolmorgorov–Smirnov Test of normality was run in SPSS for each of the descriptions in the WBLM (Ludden, 2015). A null hypothesis was created that assumed the means and standard deviations of the data were normally distributed. The means and standard deviations for each construct are presented in the leftmost column.

Kolmogorov–Smirnov Test of Normality for Construct Outcomes

Null Hypothesis	Test	Significance	Decision
The distribution of Knowledge Outcome is normal with mean 6 and standard deviation 1.031.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Experience Outcome is normal with mean 6 and standard deviation 0.988.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Community Outcome is normal with mean 6 and standard deviation 1.081.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Critical Thinking Outcome is normal with mean 6 and standard deviation 1.027.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Reflection Outcome is normal with mean 6 and standard deviation 1.073.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Deliberation Outcome is normal with mean 6 and standard deviation 0.984.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Authenticity Outcome is normal with mean 6 and standard deviation 1.205.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Courage Outcome is normal with mean 6 and standard deviation 1.142.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Collaboration Outcome is normal with mean 6 and standard deviation 1.051.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Spirituality Outcome is normal with mean 4 and standard deviation 1.590.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis
The distribution of Wisdom Description is normal with mean 6 and standard deviation 1.024.	One-Sample Kolmogorov-Smirnov Test	0.000	Reject the Null Hypothesis

Note. A one-sample Kolmorgorov–Smirnov Test of normality was run in SPSS for each of the construct outcomes in the WBLM (Ludden, 2015). A null hypothesis was created that assumed the means and standard deviations of the data were normally distributed. The means and standard deviations for each construct are presented in the leftmost column.

Appendix F—Participant Comments for Wisdom Descriptions

Knowledge description comments

Some Managers like to keep information as it makes them more knowledgeable and in a stronger position

working closer with teams at all levels

Experience description comments

"Interaction" is insufficient to develop experience. One must fully participate and make and witness mistakes.

As it pertains to developing wisdom in organizational leaders; Experience is acquired through interaction with employees / fellow team members, fellow leaders, things, activities, media, events, organizations, institutions, and society.

Experience may be acquired from assigned work, tasks in company

Interaction with PEOPLE is a very important component to develop wisdom.

Interaction with people is missing

interaction with people, not necessarily things organisations, institutions and society

The statement does not include (or it may suggest too weakly) the impact of interpersonal relationships on experience.

wisdom in not derived just from experiences.

Community description comments

1: This is a left field use of the word "community." Something like "social responsibility and awareness" would be better. 2: "Community" in this sense can be taught and learned. This was not included so I considered the statement incomplete.

Community forms the person but is not an outcome in itself

I agree with the accuracy of the description, but not necessarily that of community is essential to developing wisdom in this context

Instead of Community, I would say "External experience" or "External knowledge sources"

it is an added bonus; but to have wisdom about your company is to understand your company and understand the history behind the values that built the company to what it is today

Critical Thinking description comments

Critical Thinking is using cognitive skills that include analyzing, synthesizing, evaluating.

Reflection description comments

Add in self-reflection as well as reflection of others actions.

Again, the focus needs to be on the individual building some history within the company—some longevity with the company to understand "Wisdom within an Organization." A new employee can not have "Wisdom" about [the organization] without understanding [the founder] and his goals.

Again, I consider this incomplete. Most reflection is sense making of a persons interaction with another person. This was not included although society may suggest it but not strongly enough.

As it pertains to developing wisdom in organizational leaders; Reflection is sensemaking of a person's interaction with employees, fellow leaders, things, activities, media, events, organizations, institutions, and society.

I don't think sensemaking is the right word here and there are multiple meanings of reflection. Reflection to me means being able to help others better understand how they conceive something, usually through some form of repeating back to them their thoughts and feelings, and their motivations for those thoughts and feelings. As in "reflective practice." I suggest your definition of reflection could be better described as contemplation or consideration

reflection doesn't have to make sense, it's simply reviewing through thought what's occurred/happened and thinking about it

Deliberation description comments

in order to draw best conclusions based on available information and possibly make decisions to prepare for

Deliberate can be done solo so again I'm not sure that's the right word. Certainly, I think "with others" is not guaranteed. You're implying a consultative aspect which is an important tenet that should come from leadership. But I do somewhat disagree with your definition

wisdom leads to deliberation

Authenticity description comments

Authenticity is certainly desirable but I'm not sure it's essential. Sometimes I think leaders have to go against their own instincts. Matter of fact, judging when this is appropriate is a fuller definition of wisdom.

Authenticity is understanding the importance of maintaining very high standards with regard to worldview, values, ethics, and morals that are an essential part of a person and acting in accordance with these high standards.

change understanding with showing

I agree with the description of authenticity, but not its importance for developing wisdow [sic]. In my opinion, it is possible to be wise without necessarily being authentic.

I don't agree with this definition of authenticity, also, is this statement talking about one person or a persons [sic] reaction to another. Either way it doesn't make sense to me.

Part of leadership is being able to separate your own world view in order to appreciate all points of view before making a decision.

people gravitate towards organizations that share the same worldviews, ethics, etc. It's important culturally to have alignment ethically, etc. don't see how it develops wisdom. It may foster alignment and improve leadership. I guess I don't like the use of the word "wisdom"

Replace "authenticity" with another term, such as "consistency"

Self thinking

Values and ethics of a person do not have to be in line with a person's wisdom, especially if they personally hold values that are contrary to the organization as a whole.

Courage description comments

I disagree that courage and wisdom are necessarily correlated. It is possible to be courageous but unwise. What one "knows to be right" is not necessarily right in absolute terms.

It's to carry out those actions and decisions you think to be right. If you know they are right, even if you fail, you would have achieved the best outcome. Do you need courage for a no-risk situation?

The word courage. True courage is larger than decision making and actions in business, and intend not to use this word lightly as I feel it is overused by many in general. Maybe a better term is boldness or grit.

Collaboration description comments

1. the sentence doesn't make much sense to me (acting within the context of one's meaning? purpose in life? i don't understand what you're saying. 2. acting within the context of my purpose in life somehow enables someone else to do the same thing? 3. i agree with the working together to achieve a goal, but collaboration to me is much more about working together with a team of people that have the applicable skills/training/ideas and being open to ideas & different ways of thinking and being brave in contributing your own thoughts, ideas and experience. and then pulling out the best possible path from the ideas/skills available to reach the goal.

Collaboration doesn't always mean both parties agree or act the same

Don't agree with the definition of collaboration. Too ethereal and specific.

Don't feel as though collaboration makes a leader have more wisdom.

Group think (i.e., collaboration) can be independent of wisdom, especially if the whole collaborates itself down a poorly-justified path.

I don't think one's purpose in life has anything to do with the ability to collaborate with others.

In my opinion, "collaboration" is a neutral term, not necessarily aligned to one's life meaning or purpose.

It's not about enabling others to do the same. It's far more active than that. Elicitation, encouragement, demand and insistence are all part of the collaboration spectrum.

Spirituality description comments

"Continuous personal growth" is most appropriate here.

All of it. Wisdom can be developed individually and in community and it is lack of wisdom that drives the community to seek wisdom from a higher power or being when they have no way of validating the authenticity of that wisdom. Spiritual growth can undermine wisdom.

Always strive to be open-minded and hold respect for other perspectives and opinions than your own. Rather than focus on spiritual Growth as fundamental to acquiring and refining personal wisdom

An organizational leader does not require religion or spiritual guidance to achieve personal wisdom. This can be obtained through many ways.

As it pertains to developing wisdom in organizational leaders; most religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from a higher power or being. Continuous spiritual growth and formation is fundamental to acquiring and refining personal wisdom.

As it pertains to developing wisdom in organizational leaders; some religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from a higher power or being. Continuous spiritual growth and formation that is planned and intentional is fundamental to acquiring and refining personal wisdom for who believe it.

As it reads, it seems to imply that you have to be spiritual in order to gain wisdom. I strongly disagree that you have to be spiritual in order to gain wisdom. I believe you can gain personal wisdom without spirituality or belief in a higher power. I agree with working within a community to gain understanding and wisdom, but I do not believe that it is because the community seeks spiritual growth.

Belief in a higher power is reckless and shifts both successes and blames to something that is out of our control

Change Most to Some in first sentence. The community MAY seek its wisdom.... Eliminate last sentence

Church and state argument could be applied here

community is not required to seek wisdom from a higher power or being, although can occur in community. Spiritual growth cannot be planned, but can be approached in an intentional way.

concept of higher power or being is not related to wisdom; in fact you could argue to the contrary.

Spirituality description comments continued

Conforming to the wisdom of a higher power takes away your personal accountability for the decision taken. Therefore these decisions can only be seen as wise in the context of the religious doctrine used. Rewriting the sentence—As it pertains to developing wisdom in organizational leaders; most religions and cultures recognize wisdom is not developed individually but in community. The community often seeks its wisdom from previous generations, learning from their mistakes and their successes. Continuous reference to the accurate historical record and understanding its' context is fundamental to acquiring and refining personal wisdom.

continous [sic] growth of personal wisdom should be independant [sic] of religion etc. but arise from increased understanding of the community

Continuous ethical, moral, intellectual and personal growth that is planned and intentional is fundamental to acquiring and refining personal wisdom.

Continuous spiritual Growth and formation that is planned and intentional, can be a good Foundation in acquiring and refining personal wisom [sic].

Continuous spiritual growth is very important to the individulas [sic], not organization.

delete "spiritual"

Does not have to be from a higher power or being. It can come from one's self.

Eliminate "The community often seeks its wisdom from a higher power or being."

First of all, I believe that wisdom is both individual and cultural; aspects of wisdom are certainly developed and shared within a culture, but many aspects develop individually. Secondly, while I agree that religion, culture, and spirituality can play important roles in helping an individual to acquire and refine wisdom, they are by no means the only avenue to do so.

Fully agree with the community bit, but suggesting a linkage to a higher power or being is not ok. It implies a belief in either is required for wisdom.

growth and formation, either planned or unplanned, intentional or unintentional, can lead to wisdom

Having a sound understanding of the needs and beliefs of various ethnic and religious groups is important for good leadership and wisdom

I agree that wisdom is more developed in community than individually, but the religius [sic] context is not essential

I believe it is up to the individual

Spirituality description comments continued

I disagree that intentional spirituality is a fundamental to acquiring and refining personal wisdom. It certainly can be a component, but I don't see it as a prerequisite. It might help my understanding to have spirituality better defined here, though I still think I'd generally disagree.

I do not agree that spiritual growth is relevant in the context of personal wisdom or organizational leadership.

I do not agree with the notion that wisdom is in any way spiritually founded or somehow granted by a higher power or being.

I do not see the link between spiritual growth and wisdom of leaders.

I don't believe religion or religious belief or non belief affects wisdom. A moral compass is a more appropriate tool. A higher power or being has nothing to do with it.

I don't believe spiritual growth from within the community is linked to acquiring personal wisdom so nothing would change my mind to strongly agree.

I don't believe spiritual growth is necessary for leadership in any sense.

I don't believe that the connection to spirituality is relevant. The recognition of wisdom as a collective good and/or product doesn't require it.

I dont [sic] belive [sic] in this concept.—I would change it all.

I don't have the same belief that this is true so i wouldn't strongly agree.

I don't think a person's religion influences their leadership abilities.

I don't understand what religion or spirituality has to do with Organizational wisdom.

I struggle with the concept of higher being

I took your statement as fact, I just don't believe that it is essential to acquiring wisdom.

I would need to change my entire world view on religion and spirituality

I would need to change my view of wisdom. I'm not sure if wisdom is gained via community. I feel community often leads to "group think "and a follow the herd mentality, to fulfil the human desire to belong (as in Maslow's Hierarchy of needs). So many holding joint views to fit in with the crowd. I am not sure it is true wisdom.

I wouldn't change anything, I dont [sic] believe in the concept of any higher being or power

Spirituality description comments continued

I'm not sure how you define spiritual growth, and I certainly don't feel religious dogmas of any sort are fundamental to refining personal wisdom. So, I might change the statement to read the following to "strongly agree": " most cultures recognize wisdom is not developed individually, but in community. The community often seeks wisdom from a larger energy. Continual personal growth within one's community that is planned an [sic] intentional is fundamental to acquiring and refining personal wisdom."

I'm not sure that continuous spiritual correlates directly with professional leadership. I'm sure it can benefit some leaders but I don't think it is a premise that can be applied to all.

Its [sic] not necessary for wisdom to be developed in the community. I think wisdom can be developed individually.

Keep religion, higher power and "spirits" out

Knowledge and experience alone do not always mean there will be wisdom that follows

Leaders in an organization don't have to have spiritual growth

Mixing religion and business wisdom—seriously? What are you driving at? We don't work for a cult.

nothing. i don't agree that any reliance on a higher power or being is related to wisdom. in fact the opposite may be true.

Omit higher power or being

organizations need higher order organizing principles and vision. not necessarily religious based.

Religion is not necessary to acquire and refine personal wisdom.

remove religious references

Remove the implication that religion is a necessary component.

Remove the reference to spiritual growth, why I agree personally with this I do think that people can gain wisdom without spiritual growth.

remove this line: The community often seeks its wisdom from a higher power or being.

spiritual formation is not essential for wisdom in leadership. Non-spiritual people can still be wise and strong leaders.

Start by removing the statement about a higher power or being. Such a belief is not a requirement for spirituality or wisdom or leadership.

Spirituality description comments continued

The collaborative effort to intentionally seek spiritual growth with the help of your religious community certainly helps to refine your spiritual wisdom at a different rate than an individual effort. I disagree with stating that you can't get there without it however. It may take longer and it may come in many different forms and experiences, but I believe that your "higher power or being" can get you there. Maybe you didn't mean it this way, but the statement is coming across like, if you don't go to church you're missing one of the fundamental requirements to becoming a wise leader within an organization. And I don't agree with that.

The community often seeks its wisdom from a higher power or being.—remove so if you are not spiritual you are not able to be wise?

The concept of religion and a "higher power" is totally unnecessary for community, wisdom, or leadership.

The connection of religion with wisdom

This is hard to agree with without understanding the definition assumed for "spiritual."

this may be true of wisdom in ones self [sic] but I am not sure it necessarily transfer to the organisation. Its [sic] debatable.

To me religion and spirituality are separate and independent concepts. While not mutually exclusive, I reject the premise that religion, or belief in a higher power are necessary for an individual to have or develop spiritual growth. I further disagree that spirituality or religion are necessary for the development of wisdom in an individual.

Wisdom does not necessarily come from a higher power or being.

Wisdom is an individual attribute. That of a community isn't always true wisdom

would remove religion, do agree with the community

You can have a culture but for me it's about doing the right thing for right reasons regardless for colective [sic]

WBLM Wisdom summary description comments

I would remove the words virtue, and virtuosity. I am not sure that all wise leaders are virtuous, nor need to be.

As it pertains to developing wisdom in organizational leaders, wisdom sometimes is a dynamic process some leader [sic] use to apply knowledge, experience, and virtue to seek truth that sometimes governs the leader's actions and decisions for the organization. Wisdom sometimes engages a person's cognitive, affective, and conative abilities for personal, interpersonal, community, societal, and global improvement.

I do not agree that a given application of wisdom is necessarily dedicated to improvement.

something about failure or learning from failure.

This description needs to be simplified. It includes so many different concepts it's too difficult to determine whether they all apply.

Appendix G—Participant Comments on What Should Be Added to WBLM

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?"

"The fear of the Lord is the beginning of wisdom..." Psalm 111:10

+Fairness +not to take oneself serious; but take your leadership role seriously.

Ability to build trust and relationships with individiuals [sic]. Emotional Intelligence and soft skills. Self-awareness

Ability to gauge satisfaction of team members.

Ability to overcome failure or challenges.

ABILITY TO SEE THE BIG PICTURE

Active Listening, Problem Solving, Effective Communication Skills, Always Questioning, Empathy, Get out from behind the desk & spend time with people to understand their pain points & frustrations

Agency

An important element of wisdom to me is humanity. The idea or value in people as critical to the business and work environment. The compassion, caring and concern for people as human beings is essential to success and therefore this is part of the wisdom acquired through experience. This can also be an outcome of some of the other constructs.

Apptitude [sic]

Auto correction

Be Passionate about something

being able to use it to help others.

Challenge the system and sharing the vision

Clarity—the ability of a leader to define and effectively convey a concept, idea or purpose.

Coach

Collaborates, instills trust.

Collaboration

Commitment and dedication

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

Committment [sic]

common Sense

communication applied knowledge/skill

COMMUNICATION, UNDERSTANDING, SHARING A POSITIVE OUTLOOK THAT ISSUES CAN BE SOLVED TOGETHER AND A SENSE OF BALANCE.

Community and spirituality are difficult to understand, accept and apply to Asian culture.

Compassion

compassion

Compassion

Compassion

Confidence

conservatism

Creativity

Cultural Respect and understanding

curiosity.

Decisiveness

Defined Processes, with education and training. Intrinsic knowledge is important but documenting that which is truth is even more important.

Development: Working on and improving the teams you lead. Empowering those around you.

Diversity, Honesty

Diversity, Self Awareness/Limitation

Driving meaningful change developing others

effective communication. (Instilling all those good qualities might make a wise leader. A leader still needs to provide direction and rationale to the team.)

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

emotional intelligence

emotional intelligence (which may present itself in areas like collaboration), self-awareness (which may be within reflection)

emotional intelligence, empathy, optimism.

Empathy

empathy

Empathy

empathy

Empathy

Empathy

Empathy

Empathy

EMPATHY

Empathy—to be able to understand those that you lead.

Empathy and self-control

Empathy, Honesty, Sharing of knowledge and Appreciating the point of view from others

empathy, humanity, humility,

Empathy, Inner values

Empathy, motivation

Empathy.

Engaged

Ethics

Expressing and clearly communicating concepts derived from wisdom out to other people and groups

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

Fair-Minded. A wise and well respected leader must be impartial. I have personally dealt with this and its extremely important. A leaders [sic] judgment about matters will create trust between the people only if people see that judgments remain consistent from one situation to another.

Feedback and Courage to change "person, job or any such" if after a given time progress is NOT being made

Feeling/empathy

Flexibility, motivation

Focus

Forward Planning

Hands on experience

hard work, desire, creativity, gut feelings and competitiveness

Hardwork

honest, common sense, strong "team" skills

Honesty

HONESTY

Honesty (although it is somewhat captured in Authenticity) and Caring.

honesty and integrity are personal traits that need to be practiced as well. Sometimes they can be learned, but most of the time, they should be there from the beginning.

Honesty, Clarity of expression

Honesty, Loyalty, Trust, Fairness and togetherness

honesty, passion, professionalism, humility, respect to the others

Honesty, Truthfulness, Sincerity, Accepting, Compassionate

humanity

Humbleness and Being able to Teach

humility

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

humility

Humility

Humility

Humility—the understanding that you don't know everything and are open to learn

Humility (it's implied in the survey but not expressed)

Humility, perseverance

humor

Humor and Tolerance.

I am not quite sure how to word another concept except to use the word ego. Wise leaders put their ego aside —it isn't about them. It isn't what they gain or for their glory. They have an inner confidence to consider the needs of those they lead and encourage others to succeed.

I cannot think of any additional concepts at this time.

I do not believe that religion needs to be considered when developing leadership; consider the perverted case of Islam preached by terrorists. However, continuous ethical, moral, intellectual and personal development are [sic] important.

I do not want to add any other concept, instead I would cancel spirituality because for me is not important

I don't agree with spirituality being an essential factor for wisdom. Maybe important for personal development but not wisdom. I would add "empathy." The ability to truly put yourself in someone else's place and understand their position, is for me an essential aspect of wisdom.

I have no additions. I suspect that this flawed instrument will not give the author reliable data.

I just wanted to add that wisdom is often instilled from others in organizational leadership, but often from spiritual or critical thinking. It can be influenced, but not often given by others. Knowledge on the other hand is the combination of the above, and using that to the betterment of the group.

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

I miss inspiration from other cpmpagnies [sic] as well as benchmarking. Both are part of my daily wisdom. We can lean on eachother [sic] in [here] but we may sometimes need inspiration from others to develop our wisdom. Wisdom combined with "don't work harder" work smarter by learning from others could be used in the model. But in general it seems to fit [our organization] were well [sic]. Thanks

I really have a hard time understanding how these concepts describe wisdom, some of them are simply personal or organizational caracteristics [sic], but not necessarily related to wisdom. Also I feel they would be qualitative and perception based. Critical thinking as an example can be perceived both as something that is positive and negative in terms of how you would assess wisdom.

i think this cover [sic] almost all the aspect

I think this is a good collection of constructs or characteristics that help explain wisdom, but I did not like the specific descriptions/definitions of them very much.

I think you capture them all here!

I would add failure as a concept, as I think much wisdom can be gained from those events that don't go as planned or take an extreme turn for the worse. It's those lowest of low moments that often give people the insights into others and themselves that they need to be wise and successful leaders in the future.

I would add morality (instead of spirituality) and humility

I would add some kind of concept that more inclusively captures elements of emotional intelligence. Empathy comes to mind as a potential concept.

I would not add any concepts, but omit spirituality and courage.

I would probably replace spirituality with openness. I think that in order to gain wisdom you must be open to new experience, ways of thinking, opinions, facts, and general change. Spirituality is almost the opposite of this in some cases, where someone may define a set of beliefs or morals based on those within a specific religion, which is [sic] limits gaining of wisdom. For instance, if spirituality is defined as associating with a religion and seeking wisdom from the community seeking the same higher power, it restricts the gaining of wisdom within a community to a specific set of individuals with similar beliefs. However, if spirituality is rather defined as seeking knowledge from various groups or communities and all religions, then it would better fit. To me, the most wisdom is gained by being completely open and considering the views/truths from different types of communities.

I would replace Collaboration and maybe part of Reflection with open mindedness or open to change.

inspiration

Integrity & Honesty

Integrity, and confidence (possibly in place of courage)

Integrity, honesty, ethics, loyalty, passion, innovation, confidence, vision

Integrity, strong sense of justice,

Integrity. That may be part of authenticity in this question but I think it's separate.

Intelligence

Intergrity [sic]

Intuition

Intuition, Integrity and loyalty (understanding and being able to seperate [sic] personal and organizational interests)

Investing in your people! While you have community on the list, I didnt [sic] pick up just how important relationships are in being a wise organizational leader. Just because i can fix a problem or make a decision doesn't mean I should. Sometimes it's more important to invest in my employees to get the job done. sometimes you let them fail where you would have succeeded so that they have the growth opportunity that they need—Passion. Passion for your organization, passion for your employees, passion for your coworkers, passion for the benefit that your organization brings to the market or patient or customer—These may fall into one of the categories that you have already listed BUT i'm going to list a few more anyway. :) Flexibility, Humbleness, Active listening (if you're going to have critical thinking on the list, then this should be there too, as it is essential)

Is there anywhere in there for empathy, communication, flexibility etc.

It is crucial that a wise leader understand objective truth, that objective truth exists and can be discovered. Relativism does not lead to wise leadership.

It seems that some aspect of risk/benefit or risk-taking is missing.

Judgement

Judgement, engagement, sincerity I'd take out spirituality.

KNOWLEDGE

Comments in Response to the following: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

Knowledge, Critical thinking, collaboration, courage

Listening

listening

Listening, Encouraging, Watching, Talking

Logic and Pragmatism

Look to the future and have continuous growth in all areas listed above. If you stagnate, you will not have the wisdom to take the opportunity to change, or make change happen.

Loyalty/service, integrity, continual development

Mentorship

Mindfulness

Mindfulness/Being present

Moral behavior / Ethics

Need of growth

No additional concepts to add.

No additional concepts, but you might read up on Deming's System of Profound Knowledge if you aren't already familiar. I think it's germane.

NO more to add

No others

Non [sic], but I would remove spirituality.

None

None

None

None

Comments in Response to the following: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

One must have the ability to feel personal humility to keep yourself grounded in the principles of wisdom and leadership.

Open mindedness

Openess [sic] (lack of bias), Equality (everyone has a voice and their opinion counts)

Open-mindedness and respect for others

Passion

Passion to Learn

past personal experiences.

Patience, compassion, humility, passion

Perseverance

Personable—someone who is easily approached and willing to listen to those he leads even if the end result can't be changed

Personal drive, passion and commitment

Planning and practice

remove spirituality. Religion is a farce.

Resilience, Positive Attitude, Empathetic, Humility

Respect

Respect for people, empty brain for more wisdom, get rid of egoism and pride

Respect for your people

Respect, Empathy

Risk taking

Risk to benefit analysis

saviness [sic]

Self Awareness

self awareness

Comments in Response to the following questions: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

self awareness openness common sense discernment don't agree with spirituality

Self Awareness/Emotional Intelligence. While I value the Spirituality portion, it's necessity as it pertains to organizational leadership within a company is not something I view as a high priority.

Self motivation

Self-awareness

Self-Awareness

Self-awareness Recognition of bias

Self-awareness Vulnerability Humility Honesty

Sence [sic], Consistency

Service to others

soft skills—empathy, sympathy transparency, Honesty service others

Some or most of these may be listed above, but key concepts are continuous learning, life/work experiences, seeking wise counsel from multiple people/sources, God (the Bible, Proverbs is great!), thinking for yourself and piecing information together instead of just regurgitating what you hear from others.

spirituality

Stakeholder's good recognition; ambition to have respect of all relevant people internal/external, holizontal/vertical [sic], including final beneficiary.

Strength (might fall under courage); Compassion

Strong belief

Sympathy is a VERY IMPORTANT characteristic for an organization leader with wisdom. Not sure about Spirituality's definition. If it is about good will of human being, then I agree. If it is about religion, then I would prefer to exclude this element.

Take the human responsibility it is to lead others toward the redemption of their potential. Acceptance of not being in control. Daring to be on a journey in ever changing environments Be aware of own inner nature, strength and balance. Ensure present, clear and holistic visions. Leaders must create solid bottom lines while taking on a humanistic responsibility that extends to both care for humanity and for the planet that we inhabit.

Comments in Response to the following question: "What concepts would you add to the model because you think they are essential to a clear understanding of wisdom?" continued

Taking/considering some of systematic, consistent, local vs global (in community) ... pursuing the optimum value in the developing domain/scope.

that pretty much sums it up.

the ability of putting myself in the shoes of the people I interact with to understand better their behaviours and choices.

these concepts plus strong principles

Time wisdom gains with time, but perhaps this is reflected in experience. Also I think there may be some vision involved to be able to use the above to lead things to a better place. If wisdom isn't used to move towards a vision, is there any point in wisdom.

Tolerance, insight

Tolerance; we need patience while moving to higher thinking. Humility; wisdom is relative and often purely personal. Conviction; confidence inspires others.

transparency

Trust

Trustworthy,

Truth, Transparency

Truth, Trust, Thoughtfulness and Kindness

Understanding

understanding

Values. Always choosing to do the right next thing.

Vision

Visionary thinking: to be able to visualize what the future may/shall hold. Wisdom is also to set the direction/goals for the future.

Vulnerability

Where is the "action" and outcome in all this? The definition looks like you are describing a religious contemplative monk.

Willingness

Wisdom is what connects all the above and enables successful leadership

Appendix H—Participant Comments on WBLM Constructs as Leadership Outcomes

Knowledge as an Important Outcome of Organizational Leadership Comments

"by-product" instead of "outcome"

depends on the individuals [sic] desire to gain knowledge. some folks are self-motivated regardless of leadership. They will succeed regardless of circumstance

I believe empirical knowledge is more important and useful than given or ordained knowledge

I would not describe it as an outcome, but a precursor.

If the knowledge is provided to share with everyone in the organization

if you are not invited or part of that leadership pod than [sic] it doesn't help you get the important outcome

I'm not sure knowledge is a concept.

Knowledge is a by-product of life's experiences. While leadership may help one be more receptive to acquiring knowledge, knowledge is not the outcome of leadership.

Knowledge is a concept that is an important prerequisite for organizational leadership.

Knowledge is a concept that should be an important outcome of organizational leadership.

Knowledge is just a set of facts and know-hows. Wisdom is the ability to use this knowledge at the right time and in the correct/ethical manner. I.e. possibly for organizational leadership!

Knowledge should be a prerequisite for organizational leadership.

remove the word concept

Reverse it—Leadership is a valuable conecept [sic] that is an outcome of Experience & Knowledge

There is no causal relationship. Leadership does not guarantee acquisition of knowledge. Sometimes the opposite.

Experience as an Important Outcome of Organizational Leadership Comments

experience is not an outcome of leadership, it is a reference within which leaders can decide to make certain decisions

experience is one factor which is important in achieving organisational leadership

I believe experience and empirical knowledge are nearly one and the same

I don't think experience is an outcome of organizational leadership—each individual's experience is their own—it's not something that can be acquired from an external source.

If leadership helps people to experience and share experiences on every level of the organization

Leadership is an outcome of experience and education

motivation, Idea and inderstanding [sic]

No, it's just the opposite. Good leadership is an outcome of experience.

Organizational leadership is a concept that is an outcome of Experience.

sometimes an outcome

Valuable experience is a concept that should be an important outcome of organizational leadership.

Community as an Important Outcome of Organizational Leadership Comments

Change the word "outcome" to "component."

Community is a concept that is an important input to organizational leadership.

Community is group of people interacting and contributing together with a similar objective

Community is important in developing organizational leadership. (It is not an outcome, but the other way around.)

Community may form a part of the organization's leadership but is not an outcome in itself

I just don't feel that being strong in Community is that important of an outcome. Not sure I would change anything about it.

I would place the word "good" or "effective" before the words organizational leadership

If the leader can find common area of interest for all members of the organization and people are treated as members of the community

Organizational leadership is an outcome of of [sic] the culture of an organisation. To change or alter the course of the Organizational leadership, requires the organisations [sic] culture to be adjusted/changed.

organizational leadership should always value and stay in contact with the communinity [sic] within the fabric of the companies morals and values

The statement is not necessary true in a european context. Organization leadership and community is not necessarily connected.

You would have to change "Reality"

Critical Thinking as an Important Outcome of Organizational Leadership Comments

Critical Thinking is a concept that is an important input to, and should be an outcome of, organizational leadership.

Critical Thinking is a concept that is an important outcome of organizational leadership but, every leader should be responsible for the concept.

Critical Thinking is a concept that is an important prerequisite for organizational leadership.

Critical thinking is well trained by tackling several work in the work place but I don't think it is outcome of organizational leadership.

Flexible and positive thinking is a concept that is an important outcome of leadership.

I don't see critical thinking as an outcome of organizational leadership. Being a critical thinker is helpful for leaders but being a leader doesn't make you become a critical thinker directly.

I don't think it's necessarily an outcome of organizational leadership. critical thinking skills require an education. They may be valued by the leadership and encouraged.

I would place the word "effective" prior to organizational leadership

If an organization of open critic and opposition is built and suggestion and discussion can be done freely without fear

No. The other way around.

Organizational leadership is an outcome of critical thinking and earlier attributes described by the survey, not the other way around.

Organizational leadership is an outcome of Critical Thinking. Critical Thinking is the first step towards being wise. Empathy (an emotion) is the next.

Reflection as an Important Outcome of Organizational Leadership Comments

Add word effective

If culture of open mind and change is allowed or created throughout the organization

Organizational leadership is a concept that is an outcome of Reflection.

Per the previous comment. Reflection as a response to a particular set of issues might be an outcome of organizational leadership alright.

Reflection is a concept that is an important prerequisite for organizational leadership.

Reflection is a concept that should be an important outcome of organizational leadership.

Reflection is an important outcome of humanity in general and not limited to or heavily influenced by organizational leadership

Reflection is an input not an outcome

Same as last one. Reflection is helpful for becoming a leader but being a leader doesn't make you practice reflection.

See earlier [Organizational leadership is an outcome of critical thinking and earlier attributes described by the survey, not the other way around.]

The other way around.

Deliberation as an Important Outcome of Organizational Leadership Comments

Deliberation is a concept that is an important prerequisite for organizational leadership.

Deliberation is a concept that should be an important outcome of organizational leadership.

Deliberation is a requirement for good organizational leadership, not an outcome from it

Organizational leadership is a concept that is an outcome of Deliberation.

organizational leadership is deliberate

Please see earlier response. The attributes contribute to organizational leadership rather than the converse.

Authenticity as an Important Outcome of Organizational Leadership Comments

As per previous answer, don't agree with the description of Authenticity.

Authenticity is a concept that should be an important requirement of organizational leadership.

Authenticity is an outcome of individual choices

Authenticity is within one's dna. OL can encourage to be and stay authentic but not to become authentic

Change the definition of Authenticity.

change understanding with showing

I do not believe that authenticity is necessarily a learned trait. As such it cannot be an outcome of organizational leadership.

If values and integrity are part of corporate culture and actively cultivated in the organization

Like community, authenticity is necessary in developing strong organizational leadership, but always the outcome of it. i think authenticity is required beforehand.

no. no causal relationship in that direction.

One of the reasons

Organizational leadership is a concept that is an outcome of Authenticity.

Per the previous comment [Authenticity is certainly desirable but I'm not sure it's essential. Sometimes I think leaders have to go against their own instincts. Matter of fact, judging when this is appropriate is a fuller definition of wisdom.]

Rephrase the question? Authenticity doesn't result from organization leadership

Unsure how an organization provides this; can certainly foster. So change outcome to "important to be nurtured by organizational leadership."

Courage as an Important Outcome of Organizational Leadership Comments

Again, I would replace the word courage with another word I might forgive DB [sic] more appropriate. Boldness, daring, grit, or even belief.

Although it can potentially be an outcome, I think it is much more important as a precursor.

courage comes from within, it can't be trained.

Courage is a concept that is an important oitcome [sic] of organizational leadership in case of necessary of courage. In many cases, courage is not vital.

Courage is a concept that is an important prerequisite for organizational leadership.

Courage is a concept that should be an important requirement of organizational leadership and not something that is developed later.

Courage is intrinsic character trait.

Courage is not an outcome of leadership, in my opinion, leadership can be an outcome of courage though

I find these questions extremely poorly worded. It is unclear is they pertain to leadership in an individual leader, or leadership as an abstract quality present in an organization.

I tend to perceive decisions and actions labelled as "courageous" as brash and insufficiently considered.

If people are allowed to fail in favor of future development and potencies future success, people are able to take risks to succeed

Organizational leadership is a concept that is an outcome of Courage.

same as authenticity [Authenticity is within one's dna. OL can encourage to be and stay authentic but not to become authentic]

See above [The attributes contribute to organizational leadership rather than the converse.]

Yes it is, but not always. Leadership requires you to accept and commit to something you don't agree with sometimes. People will disagree for good reasons and there isn't necessarily one right answer. Better sometimes to agree a path and move rather than standing resolute in your corner and holding stuff up as a consequence.

Collaboration as an Important Outcome of Organizational Leadership Comments

Collaboration is a concept that is an important prerequisite for organizational leadership.

Collaboration is a concept that should be an important requirement of joining organizational leadership and not something that is developed later.

Collaboration may be important but is not vital and at times may be a detriment to developing organizational wisdom. To [sic] often, collaboration becomes compromise and consensus which can kill the development of organizational wisdom.

Don't feel that collaboration is an important outcome in regards to wisdom.

Don't mix personal goals and ambition with professional organisational objectives eg Religious beliefs and organisational objectives are separate entities.

If internal politics are not part of the organization structure and people put common interest/goals before their ego or own good

Listening

Organizational leadership is a concept that is an outcome of Collaboration.

See above [The attributes contribute to organizational leadership rather than the converse.]

Spiritual Formation as an Important Outcome of Organizational Leadership Comments

This statement implies that someone who is an atheist or agnostic could not reach any sort of higher wisdom or leadership. I would change this statement to read, "spiritual formation may be a concept that is an important outcome of organizational leadership."

"Personal growth and formation"

A definition for "spiritual" that I agree is required for organizational wisdom.

A persons [sic] spiritual believes [sic] should not be an important factor for organizational leadership. IT helps some people but to state that it is an important outcome for organizational leadership is incorrect.

Again, change the word "outcome" to "component."

Change Spiritual Formation to Personal Awareness and Growth. That leaves the possibility of spiritual formation playing an important role in personal growth but does not make it sound mandatory to accumulate wisdom.

Concern for the individual and the community is a concept that is an important outcome of organizational leadership.

Connection of religion with leadership

Continuous ethical, moral, intellectual, and personal growth are concepts [is a concept] that should be important concepts of organizational leadership.

Depends on the definition of spiritual formation but this seems to imply religion and wisdom are linked.

do not feel spiritual formation should be an outcome of org leadership

Do not mix religion into this. It's got nothing to do with wisdom.

Don't agree fundamentally with this

Don't believe that these are linked

Get with the program buddy. Its [sic] business not church. Leave private life out of it.

I agree that wisdom is more developed in community than individually, but the religius [sic] context is not essential

I cannot agree with this statement in any form.

I disagree with this one even more. As it reads, it indicates that organizational leaders must be spiritual individuals. To me, that is completely inaccurate. I do not believe that you must be spiritual in order to be successful in organizational leadership.

Spiritual Formation as an Important Outcome of Organizational Leadership Comments continued

I do not agree that any spiritual concept is a prerequisite or important outcome of leadership

I do not agree that spiritual formation is required

I do not see the link between spiritual growth and wisdom of leaders.

I do not think spiritual formation is an important outcome of organizational leadership.

I don't agree that organizational leadership in a work environment affects an individual's spiritual formation—that is individual and personal and separate to one's working life.

I don't agree towards religion being a part of organizational leadership.

I don't believe it is important

I don't believe that the connection to spirituality is relevant. The recognition of wisdom as a collective good and/or product doesn't require it.

I don't feel that a person should have to announce their faith to be a good leader, nor, should a leader enforce their religious view onto employees.

If diversity is accepted throughout the entire organization and even cultivated and efforts put ethical values to be reminded

If the spiritual formation is the spirit of the company and culture I could agree with the statement, but outside work spirituality may not always impact work.

I'm just not getting this one at all. It might be the semantics.

It can be an outcome but is it an "important outcome"?? I personally think not.

Just not a spiritual person

Moral/ethical formation is what it sounds like you are really discussing

N/A

nothing

nothing could make me agree with this statement.

Nothing I believe it is not a necessary part of Organsiational leadership

Nothing. I just don't think it's important!

Omit higher power or being

Spiritual Formation as an Important Outcome of Organizational Leadership Comments continued

Organizational leadership is a concept that is an outcome of Spiritual Formation.

Organizational leadership is not relevant to spiritual formation.

Regi lion [sic] shouldn't come into it it's about doing the right thing

religion

religion can be more cult like. I lose all faith in a leader that when backed into a corner or has a difficult decision says something long the lines of "I'll pray on it" or "god will show me the way" etc.

Religion does not have to be an outcome of organizational leadership.

Remove implication that religion is an outcome of leadership. Maybe I have been misunderstanding what is meant be "outcome."

Respect for others and having an open mind are important outcomes of strong organizational leadership; belief in a higher power is not the important concept.

I dont [sic] belive [sic] in this concept.—I would change it all.

Same as last comment—religion, higher power, and spiritual formation are not a requirement for wisdom or leadership.

Same as previous answer. [I don't have the same belief that this is true so i wouldn't strongly agree.]

Same as previous response [I would need to change my view of wisdom. I'm not sure if wisdom is gained via community. I feel community often leads to "group think "and a follow the herd mentality, to fulfil the human desire to belong (as in Maslow's Hierarchy of needs). So many holding joint views to fit in with the crowd. I am not sure it is true wisdom.]

See my previous response. i don't know how to answer this one with how the statement is worded.

see previous answer [The collaborative effort to intentionally seek spiritual growth with the help of your religious community certainly helps to refine your spiritual wisdom at a different rate than an individual effort. I disagree with stating that you can't get there without it however. It may take longer and it may come in many different forms and experiences, but I believe that your "higher power or being" can get you there. Maybe you didn't mean it this way, but the statement is coming across like, if you don't go to church you're missing one of the fundamental requirements to becoming a wise leader within an organization. And I don't agree with that.]

Spiritual Formation as an Important Outcome of Organizational Leadership Comments continued

Self spiritual formation.

Spiritual formation can be an important outcome of organizational leadership

Spiritual Formation in a non spiritual organization is not an important outcome of

organizational leadership.

Spiritual Formation is a concept that can influence organizational leadership.

Spiritual Formation is a concept that could help an important outcome of organizational leadership.

Spiritual Formation is a concept that has no bearing on organizational leadership

Spiritual Formation is a concept that is an important outcome of organizational leadership for who believe it.

Spiritual Formation is a concept that is an important prerequisite for organizational leadership.

Spiritual Formation is a concept that is NOT an important outcome of organizational leadership.

Spiritual Formation is a concept that is not necessary the important outcome of organization leadership.

Spiritual Formation is a concept that MAY be an outcome (not required)

Spiritual Formation is a concept that may be beneficial in organizational leadership, but will not necessarily be an outcome of it. Even among very successful leaders, many of them will not subscribe to any notion of spiritual formation playing a part in their success, or as an outcome of their many years of leadership.

Spiritual Formation is for individuals, not for organizarion [sic] leadership.

Spiritual formation is mostly a personal matter and much less work related in my opinion.

Spiritual Formation is not an outcome of organizational leadership. It may be part of growing a leader, but not an outcome.

Spiritual formation might be important depending on culture.

Spiritual formation must begin as an individual before you can be a useful member of the greater community

Spiritual Formation as an Important Outcome of Organizational Leadership Comments continued

Spiritual formation shouldn't have any direct correlation with organizational leadership.

Spiritual formation typically implies religion—and I don't believe that religion is imperative to organizational leadership.

Spirituality doesn't enter into it.

to define spiritual formation as a personal characteristic based on understanding of the community unrelated to religion or personal beliefs

Value Formation is a concept that is an important outcome of organizational leadership.

Wisdom as an Important Outcome of Organizational Leadership Comments

Add the word "effective" before "organizational leadership"

If organization is humble, active communication encourgaed, culture of mutual respect forsted [sic] and continuously maintained, last but not least everyone tries to learn from each other

Just no.

not necessarily

Organizational leadership is a concept that is an outcome of Wisdom.

same as authenticity

The will to pursue wisdom comes from within. it is not given by the organisation. But can be developed with help and support from leadership

Wisdom does not originate with organizational leadership, but can be affected by, and enhanced by them

Wisdom is a concept that is an important prerequisite for organizational leadership.

Wisdom sometimes is a concept that is an important outcome of organizational leadership but, sometimes need to be changed.

Appendix I—Wilcoxon Signed Rank Test of Significance for Construct Descriptions

Null Hypothesis	Test	Significance	Decision
The median of Knowledge Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Experience Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Community Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Critical Thinking Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Reflection Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Deliberation Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Authenticity Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Courage Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Collaboration Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Spirituality Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Wisdom Description equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis

Note. A One-Sample Wilcoxon Signed Rank Test of significance was run in SPSS for each of the construct descriptions in the Wisdom-Based Leadership Model (Ludden, 2015). A null hypothesis was created where the median of the description equaled the Likert scale midpoint of 4. Asymptotic significances are displayed. The significance level is .01. For each construct description the null hypothesis is rejected. Each of the construct descriptions in the WBLM is statistically significantly above the Likert scale midpoint of 4.

Appendix J—Wilcoxon Signed Rank Test of Significance

for Construct Being an Important Leadership Outcome

Null Hypothesis	Test	Significance	Decision
The median of Knowledge is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Experience is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Community is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Critical Thinking is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Reflection is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Deliberation is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Authenticity is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Courage is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Collaboration is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis
The median of Spirituality is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.036	Retain the Null Hypothesis
The median of Wisdom is an Important Leadership Outcome equals 4.	One-Sample Wilcoxon Signed Rank Test	0.000	Reject the Null Hypothesis

Note. A One-Sample Wilcoxon Signed Rank Test of significance was run in SPSS for each of the construct as an important outcome of leadership for the Wisdom-Based Leadership Model (Ludden, 2015). A null hypothesis was created where the median of the description equaled the Likert scale midpoint of 4. Asymptotic significances are displayed. The significance level is .01. For each construct being an outcome of leadership the null hypothesis is rejected except for spirituality. Each of the construct descriptions in the WBLM is statistically significant above the Likert scale midpoint of 4 with the exception of spirituality.

VITA

Chad Aaron Schulenburg received a BS from Indiana Wesleyan University in 2004 with a triple major of Business Administration, Marketing, and Communication Studies. After a brief period in the insurance industry, he returned to school and completed his MA in Organizational Communication and Development from Ball State University. While at Ball State, Chad began teaching, and it seemed he had a knack for it. He taught as an adjunct professor for various colleges and universities over the next several years before pursuing his Ph.D. in Organizational Leadership. Chad now serves as a global trainer for Ethics & Compliance at a large manufacturing company in the Midwest.

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