Wisdom and Leadership:
An Exploratory Study on Accelerating the Cultivation of Wisdom

By

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A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

April 2023

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ABSTRACT

Wisdom and leadership should go hand in hand. Both are concerned with human flourishing. Leadership is about making the right things happen the right way for the good of the collective. Discerning and doing the right things ultimately requires wisdom. While wisdom is esteemed as the highest intellectual and moral virtue, few studies explore the relationship between wisdom and leadership, especially how leaders understand and acquire wisdom. The three guiding questions for this study were: 1. Would higher education leaders who participate in a wisdom educational intervention experience an increase in their self-reported wisdom scores? 2. Do years of leadership experience moderate leaders' self-reported wisdom scores? and 3. Do faith, gender, years of leadership experience, and specialty/career field affect self-reported wisdom scores? A pretest-posttest control-group design was utilized using Ardelt's abbreviated Three-Dimensional Wisdom Scale (3D-WS-12). This study explored the nature of wisdom, whether leaders could accelerate their acquisition of wisdom by reading a synthesis of wisdom, and leaders' reading habits. Leaders in four-year universities across the United States were randomly assigned to two groups. They completed the abbreviated 3D-WS-12 before and after the experimental group read a primer on wisdom. The study did not find statistical significance for its three hypotheses. However, participants' answers to the open-ended questions revealed they found the intervention helpful in acquiring and practicing wisdom; most acknowledged that they did not engage in much outside reading. Results indicate additional research is needed to explore the relationship between wisdom and leadership and how leaders can cultivate wisdom.

Keywords: wisdom, instruction, knowledge, higher education leaders, readings, faith, learned wisdom.

DEDICATION

I dedicate my research to you, my son, Adriel J. Gonzalez.

I believe God has created us in his image and with a spirit of power and love,

a longing to grow, learn, and flourish. I pray that you will always know that God loves you and will never leave you, and may my reaching my dream of attaining a PhD be a testimony to you that you can reach for the stars and beyond. So fly, my son, and know you will always have a loving home to return to. And know that being your mother has been the greatest achievement I could have ever dreamed of, the most beautiful blessing in my life. I love you.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the many people without whom I would not have been able to complete this research and without whom I would not have made it through my Ph.D. degree.

To Dr. John Shoup, my dissertation chair: thank you for the countless e-mails and meetings in which you patiently provided guidance, critique, and mentorship. I could not have asked for a better dissertation chair who believed in my research and whose insight and knowledge of the subject matter wisely guided me through this research.

To Dr. Monica O'Rourke, my dissertation committee member, thank you for your ongoing support, prayers, and enthusiasm. Your encouragement and guidance were invaluable in the attainment of my degree.

To Dr. Jacqueline Gustafson, my dissertation committee member: Thank you for believing in my research and the suggestions and words during my defense; they were challenging and uplifting.

To the higher education leaders, who took the time to return the surveys, and without whom I would have no content for my dissertation.

To the Leadership Institute staff and CBU team: Thank you for your time and investment in leadership and the kindness and support you provided me with. I hope I am a better scholar, leader, and human because of you all.

To my Leadership Institute cohort: Thank you for your support during this journey and encouragement along the way. You have been a blessing, and I wish each of you the best!

And my most profound words of gratitude to my family and friends for all the support you have shown me through my Ph.D., the culmination of three years of learning.

To my mom, thanks for all your support and belief in me. And to my son, Adriel, sorry for being temperamental at times while I wrote this dissertation. Thank you for putting up with me being sat in the office for hours on end and for providing your ongoing support throughout my journey. I simply couldn't have done this without you. You have been amazing!

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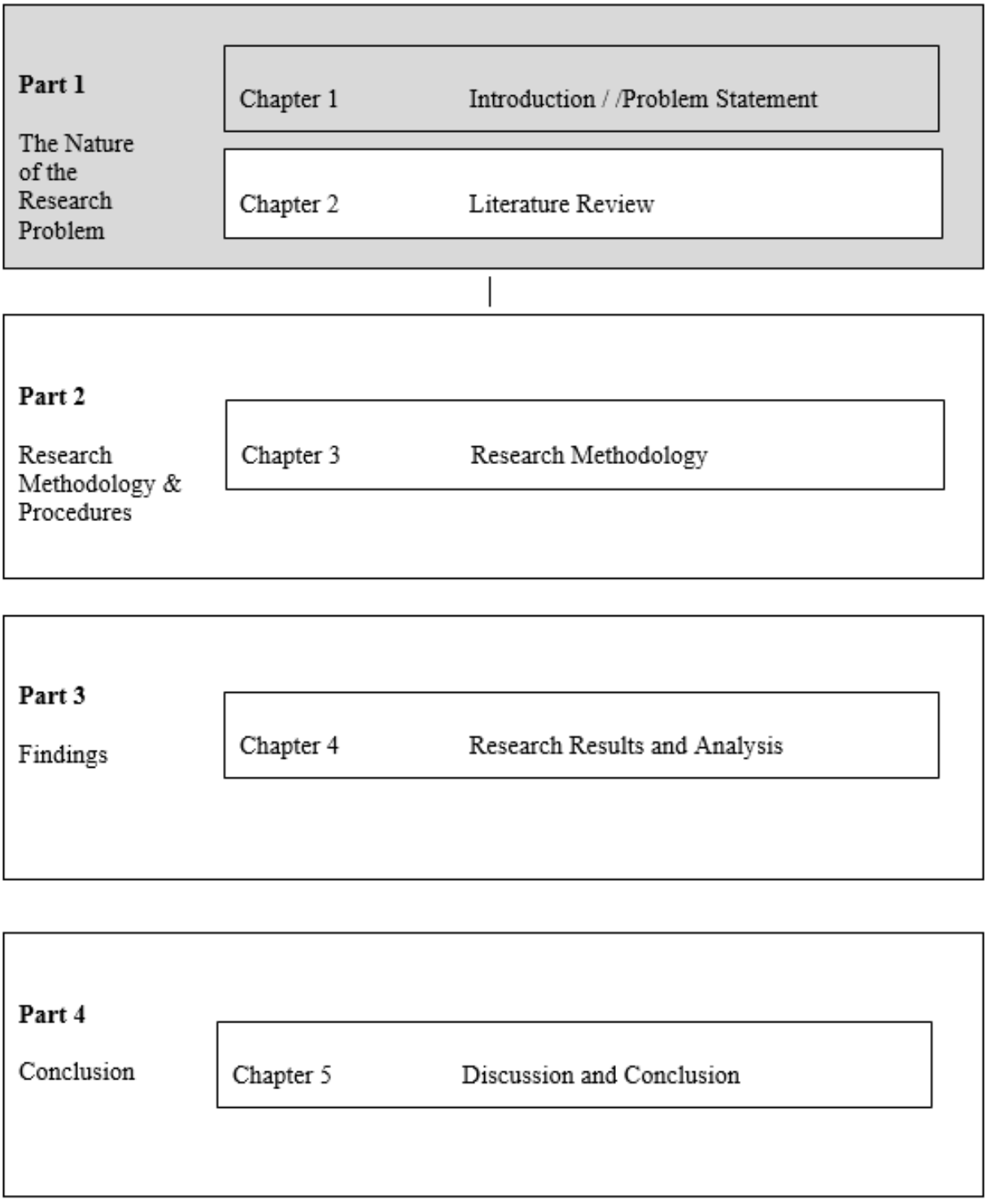
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Introduction and Problem Statement

Chapter Overview

This chapter explains the study's purpose and discusses the background of the problem and research statement. It describes the research methods and defines key terms utilized in this study.

Background of the Problem

Wisdom has been studied for thousands of years, with the consensus that wisdom is the highest level of enlightenment (Ardelt, 2004; Baltes & Staudinger, 2000; Baltes & Smith, 2008; Shoup et al., 2021). However, despite this agreement, today's wars, global environmental issues, and the recent COVID-19 pandemic indicate wisdom is desperately needed (Sternberg & Karami, 2021, Sternberg et al., 2019). Wisdom is "not merely an abstract concept but a real-life resource used daily to enhance human lives" (Weststrate et al., 2016, p. 1). Wisdom is vital for the individual and the community to effectively manage life's multiple competing demands and successfully navigate life's ambiguities and ethical dilemmas. For centuries, philosophers have contended that wisdom is the way to live well. Therefore, all leaders must seek to understand, cultivate, and grow in wisdom.

Wisdom is considered a multi-dimensional characteristic, with the whole being more significant than the sum of its parts. Furthermore, wisdom has been related to "prosocial values and behavior, suggesting that wisdom is a useful construct not only for the individual but also serves the common good" (Baltes & Staudinger, 2000). Wisdom supports human flourishing. It "involves promoting the well-being of others, and because empirical evidence suggests that wisdom is related to improved quality of life and better quality of relationships" (Ardelt, 2000, Thomas et al., 2017, p.71), wisdom is vital to society.

Given that wisdom benefits society as a whole and the complex and multifaceted challenges our world is currently facing, wisdom is essential to preparing and training future leaders and human citizens to "not only be intelligent and smart but also wise, ethical, and concerned about the well-being of all people irrespective of their racial, ethnic, sexual, cultural, or religious backgrounds" (Ardelt, 2020, p.30). Grossman et al. (2020) assert that "at the core of such sentiments is a call for greater wisdom that will be necessary for mastering the growing complexity and uncertainty of an ever-changing world" (p.103). Leaders must acquire the necessary tools to learn, practice, and teach wisdom (Shoup et al., 2021). While numerous studies on wisdom exist, much is yet to be discovered—most notably, learning how to cultivate and grow wisdom, specifically wisdom and leadership. Schwartz and Sharpe (2010) stated that rules and incentives are insufficient to solve our world's problems; we need wisdom and wise leaders to lead the way. Wisdom is necessary for leadership today. This study examines wisdom and higher education leaders, exploring the possibility of growing wisdom in an experimental approach.

Statement of the Research Problem

In recent years, there has been a growing interest in wisdom and agreement that there is still much to be learned. There are recurring themes presented in literature around wisdom and leadership: wisdom can be measured, wisdom can be attained, wisdom is a benefit to leadership, wisdom can be measured using reliable measuring tools. Furthermore, there is a resounding agreement that more research on wisdom is needed, especially learned-wisdom and wisdom-related knowledge. Little research has been conducted on the lack of understanding or even a model of wisdom attainment. Staudinger (1999) asserts, "striving to understand the complex

ways in which some people develop wisdom with age whereas others do not seem worth the effort" (p.662). Seeking to understand and cultivate wisdom is not only a challenge for the future, "it is the future because the future is not something people enter, it is something people help create" (Baltes & Staudinger, 1993, p.80). Hence, this study aimed to contribute to the current body of research on wisdom and leadership and examined the possibility that wisdom can be cultivated in an accelerated approach.

This study utilized the abbreviated 3D-WS-12 measure developed by Ardelt (2003) and open-ended questions to collect data to answer the research questions and hypothesis. The following are the IV and DV variables: Independent variables (IV): active: an exposure to instruction (reading a condensed version of chapter 4 of the book, *A Primer for Leaders and Learners, Pursuing Wisdom*), and Dependent Variables (DV): self-reported wisdom as measured by the 3D-WS-12 scale. Chapter three provides a thorough discussion of the measure utilized and the open-ended questions asked of the participants.

Presentation of Methods and Research Questions

Specific Questions

1. Can wisdom be acquired through a purposeful approach with exposure to wisdom literature?
2. Does a condensed wisdom educational intervention help leaders grow in wisdom?
3. Would higher education leaders participating in a learned-wisdom learning intervention increase their self-reported wisdom?

Research Hypotheses

The following hypotheses were tested in this study:

H_1- There is a difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not.

H_{01}- There is no difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who do not.

H_2- The number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower.

H_{02-} The number of leadership year experience does not moderate the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower.

H_3- Self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

H_{03}- Self-reported wisdom from higher education leaders will not be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

Type of Study

This study is primarily an empirical quantitative study, with a qualitative subset involving open-ended questions to collect data to answer the research questions. The study's design is a pretest-posttest control-group design used to examine the relationship between exposure to educational reading material on wisdom and self-reported wisdom. This study aimed to empirically evaluate whether the delivery of educational reading material on wisdom impacted

self-reported wisdom and contribute to the current research that wisdom can be learned, focusing on leaders of institutions of higher education.

Delimitations

This study acknowledged several delimitations. First, participants were leaders in higher education institutions, limiting the boundaries of the findings to higher education institutions. Furthermore, the abbreviated 3D-WS scale was utilized in this study, a research design not previously used by the instrument's creator.

Limitations

This study also recognizes several limitations. The first limitation is the reliability and validity of the instrument utilized and its use for the present study. In addition, a possible limitation is the time allotted for the intervention to read the condensed version of chapter four of the book. Likewise, the pilot's study subject of inquiry—examines the relationship between instruction and self-reported wisdom. In addition, this study examines wisdom from a western cultural frame of reference without examining culture's role in cultivating wisdom. Last, the proportional sampling numbers limit generalizing the findings to the general population and the convenience sample method utilized to recruit participants.

Assumptions

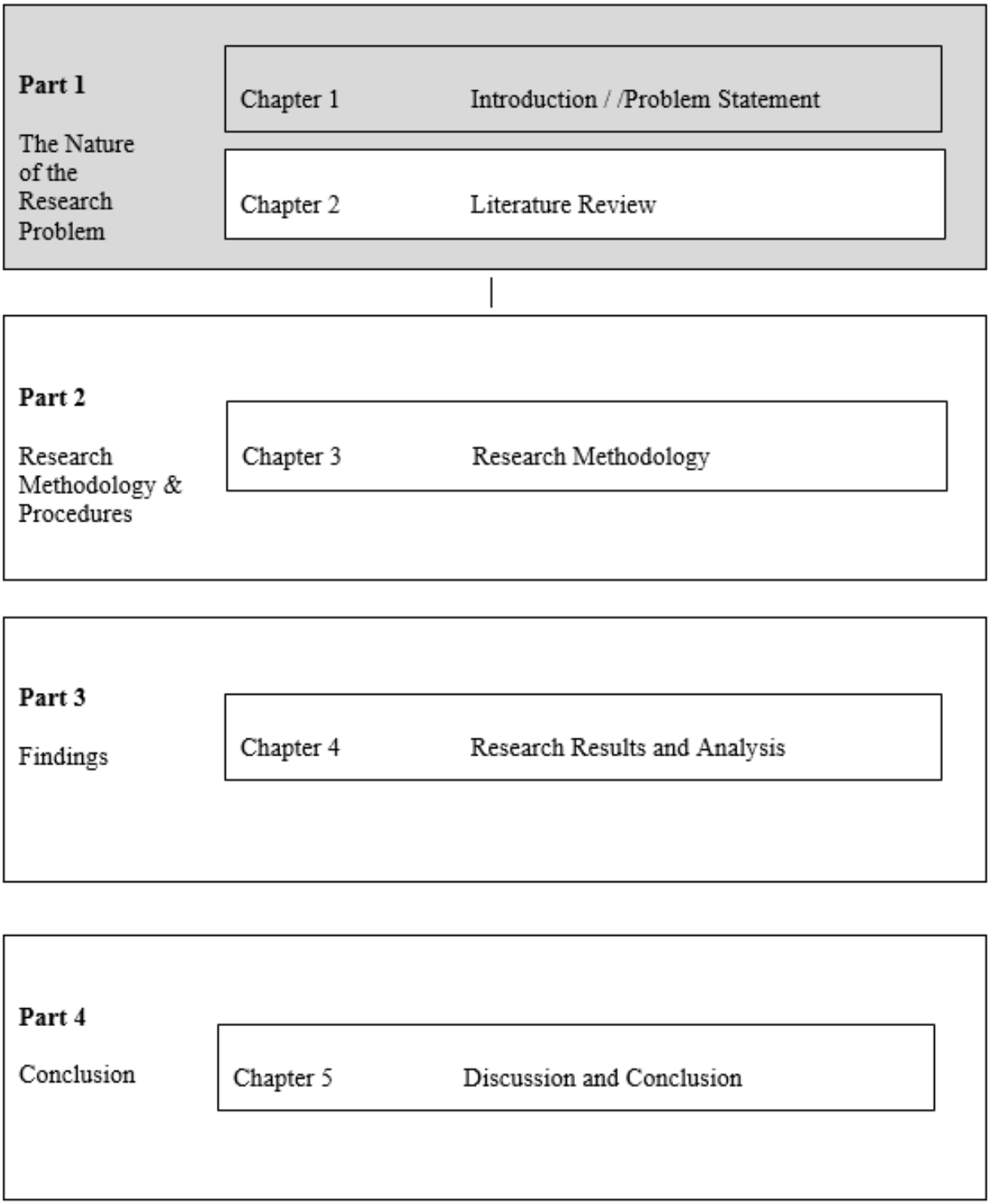
There are also several assumptions identified in this study. First, the researcher's belief that wisdom is attainable and that wisdom can be learned in a systematic approach. Next, the assumption is that participants will be motivated to participate in the study and will be able to follow directions. Last, the belief of the researcher that a connection between IV and DV exists and can be discovered.

Definitions of Key Terms

Wisdom: the research aimed to investigate wisdom and the impact of instruction on wisdom and self-reported wisdom; therefore, wisdom for this study was defined as "a combination of cognitive, reflective, and affective personality qualities" (Ardelt, 2011, p. 242). For a specific and expansive definition of wisdom, reference Ardelt (2020), page 31.

Higher Education Leaders: vice president, dean, chair, or administrative positions within the higher education system with staff reporting to them and for whom they are responsible for leading.

Moderating Variables (MV): faith (religious vs. non-religious), gender (male vs. female), years of experience (plus five yrs. on the job vs. less than five years), educational level (degree type), and type of institution.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Review of the Literature

"The purpose of life is not to be happy. It is to be useful, to be honorable, to be compassionate, to have it make some difference that you have lived and lived well." ~Ralph Waldo Emerson

Chapter Overview

This chapter aims to set the stage for the present study addressing wisdom from three main perspectives: philosophical, theological, and empirical. For this study's intent, the literature review focuses on the empirical tradition, concisely evaluating the theological and philosophical perspectives. The chapter follows a similar structure as the book *Pursuing Wisdom: A Primer for Leaders and Learners* (Shoup et al., 2021), examining wisdom from the philosophical, theological, and empirical studies. The chapter comprises the following main sections: theoretical framework, philosophical perspective on wisdom, theological perspective on wisdom, empirical studies perspective on wisdom while expanding a discussion on wisdom and leadership, and chapter summary.

Theoretical Framework

Wisdom, it can be argued, is the highest form of understanding (Sternberg, 2003a). It is situated in philosophy, theology, and empirical studies. Wisdom is not isolated to one field of study; it is a way of understanding that permeates all frameworks established on a profound level of discernment. Wisdom is found in the philosophical context, which seeks to answer when humans are at their best. It is also in the theological framework, which addresses how to live a good life, and in the social sciences – in positive psychology, exploring how human flourishing is attained. Wisdom has been studied since the beginning of human existence and will most likely continue to be examined for thousands of years. Wisdom is understood differently based on the lens one uses to study wisdom. From a philosophical perspective, wisdom is a moral and

intellectual virtue, a habit developed over time and in the community with others. In the theological view, wisdom is understood as a deep understanding and fear of God. Then from the social sciences, wisdom is understood as a trait one can develop, measured by observation or self-reported. To date, there is no one agreement. However, all three frameworks have a common theme: wisdom is vital for living a good life. There is a consensus that wisdom is the highest form of understanding, essential to effectively managing life's complexities.

Even though it has been a topic since the beginning of human civilization, the study of wisdom has become a subject of increased scientific interest and inquiry over the last 30 years; (Gugerell & Riffert, 2011; Jeste & Vahia, 2008; Weststrate et al., 2016). Greek works of pre-Socrates, Socrates, Plato, and Aristotle discuss wisdom extensively in their writings. Theology, the study (ology) of God (theos), and current empirical studies also discuss wisdom in their works. Wisdom historically has been considered the epitome of human development (Ardelt, 2004; Baltes & Staudinger, 2000; Staudinger & Baltes, 1996). This idea of human development, the highest level of enlightenment (Shoup et al., 2021), has been studied by ancient and modern philosophers, theologians, researchers, and civilizations. However, wisdom as necessary to human flourishing has been lost throughout time, replaced by rules and regulations and quick solutions (Schwartz & Sharpe, 2010)—arguing that the world needs to cultivate practical wisdom. Furthermore, this highest form of understanding is being replaced by a practical society focused on means and outcomes. If this world is to flourish, leaders must possess the wisdom to lead through the complexities of this ever-changing and fast-paced world.

Philosophical Perspective on Wisdom

Wisdom is present in the word philosophy, meaning the love (*philos*) of wisdom (*sophia*). Philosophers are lovers of wisdom and, as such, ask questions related to the purpose of

life, being constructive and critical in the quest to explore the truth. Wisdom is the core of philosophy and is rooted in the classical works of philosophers such as Socrates and Aristotle. Additionally, wisdom appears in recent studies of Eastern traditions such as Confucianism and Buddhism (Intezari, 2013). Nevertheless, this study will only briefly discuss the philosophical perspective, instead focusing on empirical studies of wisdom.

Wisdom is timeless and universal, studied throughout time; Socrates, Plato, and Aristotle are names that come to mind most when researching philosophy and wisdom. Socrates is thought of as "the first who brought down philosophy from the heavens, placed it in cities, introduced it to families, and obligated it to examine into life and morals, and good and evil" (Cusher & Menaldo, 2021, p. 7). A wise life, a life studied for the fruits it produces, is what Socrates argued with his famous statement: "An unexamined life is not worth living" (Plato, 38a5-6). It is vital for leaders to understand the best course of action for themselves and the community at large (Pellegrini & Ciappei, 2013, p. 769). Wisdom is essential to supporting humans in effectively managing life's complexities and successfully navigating the multitude of ethical dilemmas.

Socrates, Plato, Aristotle, and Boethius provide seminal works that contribute to understanding wisdom and reveal how it is understood in the philosophical arena. In Plato's *Apology* (Plato, 2020), Socrates exemplified the importance of examining one's life, reflecting, pondering, and exalting how an unanalyzed life is useless. Affirming how taking time to self-reflect is an essential trait of a wise person. In the Allegory of the Cave, Plato illuminates how understanding the natural world and the knowledge of the "forms" comes through reflection (Plato, 2017). The captain in Plato's *Republic* is another allegory Plato uses to reinforce the principle that the path to enlightenment is through examination, showcasing how the captain can see the broad aspects of a voyage, understanding the form of the good of the natural world

(Plato, 375 BCE/2003). Both metaphors elevate the importance of understanding the nature of the world through reflection.

Boethius's *Consolation of Philosophy* also speaks of wisdom by sharing the account of his year during imprisonment and his intimate conversation with lady philosophy. Boethius converses about wisdom, virtue, and true happiness, among other topics, where true happiness rests in the quest for wisdom, a divine source (Boethius, 523/2002). Aristotle's *Nicomachean Ethics*, which will be discussed in more detail, presents life's virtues (*arete* in Greek) and vices, including the wisdom to live a good life. Aristotle, in *Nicomachean Ethics*, describes virtue as a deliberate choice to make the right decision, not for the benefit of oneself, but for the good of society (Aristotle, 340 BCE/2009)—a habit developed over time in a community with others. The essence of wisdom is a habit based on an individual's character developed with others in the direction of an extraordinary life.

Furthermore, Aristotle (340 BCE/2009) wrote about *sophia* and *phronesis*, where *sophia* is the thoughtful, intuitive wisdom that concerns itself with discerning the right ends based on an accurate understanding of truth and human good. And "*phronesis* is knowledge of all things necessary to follow a course of reasoning (Aristotle, 340 BCE/2009). Therefore, *sophia* and *phronesis* are both wisdom. *Sophia* deals with the universals and the ultimate ways, and *phronesis* deals with the practical aspects of living—two sides of the same coin.

Aristotle (340 BCE/2009) also presents four virtues: prudence, justice, fortitude, and temperance. He explains how these four virtues are vital to a fruitful, harmonious life. However, the cardinal virtues must be balanced, for they complement each other. For example, wisdom without temperance is dreary, and temperance without wisdom is futile (Aristotle, 340 BCE/2009; Pieper, 1966, Shoup et l., 2021); adding wisdom is both a moral and intellectual

virtue necessary to live a most extraordinary life. Aristotle (340 BCE/2009) asserts that virtue is intellectual and moral, emphasizing that intellectual virtue comes from teaching, while moral virtue is a result of habit (p. 23). Thus, virtues are essential to living an extraordinary life. Furthermore, Hauerwas and Pinches (1997) argue that happiness- "formed in reference to God" and "as lived through the virtues, involves the skills we need to be steady through the good and bad fortune of our lives so that our present is continuous with our past" (p. 12). Wisdom is essential to attaining a well-lived life, in addition to the four cardinal virtues presented by Aristotle: prudence, justice, fortitude, and temperance.

Additionally, Aristotle wrote about understanding happiness, presenting *eudaimonia* as the ultimate happiness attained by pursuing excellence in life (Aristotle, 340 BCE/2009, Ross & Brown, 2009). Aristotle affirmed that happiness is an end to itself, where nothing else is needed, for *eudaimonia* is self-sufficient, "the best, noblest, and most pleasant thing in the world" (Aristotle, 340 BCE/2009, Ross & Brown, 2009, p. 14)—the realization of *telos*. Aristotle argued that a person's *telos*—a human's final purpose, is to live a most extraordinary life, to be virtuous, and to attain *eudaimonia* (Aristotle, 340 BCE/2009, Ross & Brown, 2009).

McIntyre (2007) encourages people to keep close to the virtues of justice, wisdom, temperance, and courage, which he argues are required for an extraordinary life and leadership. Wisdom is vital to leading a most extraordinary life and leading well. Moreover, Piper (1966) asserts that "not only is temperance beautiful in itself, it also renders men beautiful" (p. 203) and "wisdom is a virtue that equips its possessors to be exceptionally skilled at living" (Shoup et al., 2021, p. 93). Therefore wisdom, combined with the cardinal virtues, is vital to achieving a well-lived life. Human flourishing requires virtue, happiness (VanderWeele, 2017), and wisdom. The

philosophical perspective exemplifies how wisdom is critical to living a remarkable life, requiring both *sophia* and *phronesis* to navigate the particulars and universals of life.

Philosophy describes wisdom as a moral and intellectual virtue. Aristotle argued that wisdom is acquired through habit, while Socrates and Plato argued that it is acquired through self-reflection and an evaluated life. Both habit and self-reflection require that a person intentionally seek wisdom and invest the time to practice it and reflect on the experience of life. As Socrates contends, an unexamined life is not worth living. It is both *sophia* and *phronesis*, contemplative and calculative. Wisdom from a philosophical lens provides the ability to understand the subtleties of life. It provides a deep understanding of living and a practical guide for attaining it. Wisdom supports human flourishing. It is a guide to achieving the ultimate happiness; *eudaimonia.* It is excellence, the fulfillment of a human's *telos*, living a happy, wise, virtuous *eudaimonia* life—a realization that no other pursuit can satisfy. And it is a virtue attainable by anyone who pursues it.

Theological Perspective on Wisdom

Wisdom is also present in theology, the study (ology) of God (theos). Theology, unlike philosophy, refers to the study of doctrines, beliefs, and practices concerning God (Worthing, 1994). In theology, wisdom results from divine truth interpreted in sacred texts. According to Worthing (1994), theology is the "queen of the sciences" (p. 414) that brings together all other sciences. This study acknowledges the vast and growing wisdom literature extending from the empirical to the theological spectrum (Dell, 2008) and the significant theological texts, such as the Quran, Vedas, and Sutras. However, this study will focus on the Bible, given its foundational influence on Western civilization as one of the oldest texts written.

The Bible is unique in that it was written over 1,500 years ago, with over 60 books and 40 different authors, over one of the most extended periods. This study's primary focus is presenting a concise overview of the Bible regarding wisdom. As previously addressed, the philosophical tradition treats wisdom as an intellectual and moral virtue, whereas theology views wisdom as dealing with heavenly matters. Theology is the tradition that provides an understanding of how to be skilled at living in both the temporal and eternal worlds, considering wisdom as the foundation for understanding the peculiarities of life and living a life according to God's laws, bearing fruits.

The Bible can be divided into two significant sections, the Old Testament and the New testament. The Old Testament includes the Torah, Nevim, and Ketuvim, consisting of 39 books written before the birth of Jesus. The New Testament comprises 27 books written after the birth of Jesus. There is a wisdom genre in both Bible sections, with the Hebrew and Greek words for wisdom appearing in over two-hundred passages. In the Old Testament, the Hebrew word is *chakam;* in the New Testament, the Greek words are *sophia* and *phronesis.* The 200 passages reveal an overarching theme regarding wisdom: God gives wisdom, anyone can ask God for wisdom, and living a life that adheres to God's way results in a good and fruitful life. Moses' call to his people represents the importance of following God's wise counsel, exalting how wisdom and understanding lead to goodness. "Observe them carefully, for this will show your wisdom and understanding to the nations, who will hear about all these decrees and say, 'Surely this great nation is a wise and understanding people'" (*New International Version,* 1978/2011, Deuteronomy 4:5-6)—illustrating wisdom as following God's rules.

The Torah, which means "instruction" or "law," is the compilation of the first five books of the Hebrew Bible. Here, the passages containing *chakam* (wisdom) present wisdom as given

by God as an understanding to be skillful at living and as a gift to artisans able to do the work of God. As exemplified in Exodus 31:3-4, "I have filled him with the Spirit of God, with wisdom, with understanding, with knowledge, and with all kinds of skills—to make artistic designs for work in gold, silver, and bronze" (*New International Version*, 1978/2011). God gives wisdom, resulting in the ability to live well and understand how to navigate the earthly world based on God's eternal truths.

Another example of wisdom manifested in the Torah is in Deuteronomy 5:1-2 when Moses declares, "hear, Israel, the decrees, and laws I declare in your hearing today. Learn them and be sure to follow them. The LORD, our God, made a covenant with us at Horeb" (*New International Version*, 1978/2011). Wisdom is a skill, the ability to do something or accomplish excellence (Curtis, 2017). This recurring theme continues throughout Deuteronomy as Moses elevates the importance of following God's laws and impressing them not only in their hearts but their children's hearts, to reflect on them, talk about them, and tie them to themselves. "These commandments that I give you today are to be on your hearts. Impress them on your children. Talk about them when you sit at home and when you walk along the road when you lie down, and when you get up. Tie them as symbols on your hands and bind them on your foreheads. Write them on the doorframes of your houses and gates" (*New International Version*, 1978/2011, Deuteronomy 6:6-9). Wisdom is the ability to follow God and stand by his laws on this earth.

Deuteronomy 4:1-2 presents one more example of how wisdom is displayed in the Torah. Here, Moses again urges his people to follow God's laws, explaining how following God's laws will result in a well-lived life, successfully attaining God's plans. "Now, Israel, hear the decrees and laws I am about to teach you. Follow them so that you may live and may go in and take possession of the land the LORD, the God of your ancestors, is giving you. Do not add to what I

command you and do not subtract from it but keep the commands of the LORD your God that I give you" (*New International Version*, 1978/2011, Deuteronomy 4:1-2). Wisdom provides the discernment to make the right choice by making the correct decisions and following God's laws. It requires being intentional about living life and committing to follow God's laws on earth.

Furthermore, in the Nevi'im (the prophets), the second of the three major biblical divisions written by the former and latter prophets, the wisdom passages in this book reveal how God provides the discernment to make wise decisions. God is the source of wisdom for understanding the general and specific things in life and discerning the right decision at the right time for the right reasons. Repeatedly, wisdom is presented as a practice, observable, and perceived by others. An example of wisdom as a way of being is found in Micah 6:8 "He has shown you, O mortal, what is good. And what does the LORD require of you? To act justly and to love mercy and to walk humbly with your God." Wisdom is the insight and understanding God gives to make the right decision that others will observe and be able to call wise, for relying on oneself would be foolish.

In the Ketuvim, the wisdom passages reveal that the fear of the Lord is the beginning of wisdom, and wisdom is more significant than any riches of the world. Wisdom equips us to live a happy and prosperous life. As Curtis (2017) asserts, "wisdom in the Old Testament regularly involved the ability to do something or accomplish a desired objective as opposed to the accumulation of information or theory formation" (p. 19). An example of wisdom as a guide to living well is in Proverbs, written by King Solomon. Proverbs present wisdom as a guide to making good choices when faced with dilemmas in a way that is useful to the reader. They provide a simple yet profound picture of wisdom and its applicability to daily living. This is illustrated in Proverbs 4:7, where the reader is informed clearly about how wisdom is vital and

how to obtain it. “The beginning of wisdom is this: Get wisdom. Though it cost all you have, get understanding” (*New International Version*, 1978/2011).

As Proverbs continues, Solomon proceeds to elevate the importance of wisdom, presenting wisdom as a moral and rational virtue, the right relationship with God: “The fear of the Lord is the beginning of wisdom, and knowledge of the Holy One is understanding” (*New International Version*, 1978/2011, Proverbs 9:10). This Bible verse reiterates the importance of following God’s laws and his way of living to attain an excellent and flourishing life. Wisdom is the guiding light to living well. Wisdom is vital to achieving a remarkable life. Solomon asserts, “trust in the Lord with all your heart; and lean not unto your understanding. In all thy ways acknowledge him, and he shall direct your paths” (*New International Version*, 1978/2011, Proverbs 3:5-6). God is the guide and source of wisdom, the key to a flourishing life.

Two other books in the Ketuvim that provide compelling examples of wisdom in the Bible are Ecclesiastics and the book of Job. Ecclesiastics presents wisdom as the ultimate and highest value in life. Written by Solomon, an affluent king, these passages affirm how wisdom is better than any earthly fortune or weapons of war and given only by God (Ecclesiastes 7:10 and 10:1). In the book of Job, wisdom is presented as the answer to understanding and successfully dealing with the most atrocious experiences in life. As the reader walks through the story of Job, wisdom is revealed as facilitating a deep understanding of the complexities of life that do not fall into any previous pattern. God gives the wisdom to deal with all the uncertainties and unfairness of life, as seen in Job: “…Be silent, and I will teach you wisdom” (*New International Version*, 1978/2011, Job 33:33).

Likewise, in the New Testament, the wisdom passages reveal how wisdom is indispensable to living and navigating on earth while abiding by divine laws. Wisdom is also

shown as attainable and incremental, resulting in the way of being and living. For example, God says to "be shrewd as snakes and innocent as doves" (*New International Version*, 1978/2011, Matthew 10:16), providing direction on how to be wise and virtuous while managing the complexities of dealing with two worlds, the temporal and the eternal. Hence, wisdom is exemplified as action—a way of being, a capability to discern the right choice, given all the multiple storylines at the right time (Curtis, 2017). Wisdom is living life in a specific way. The Apostle Paul illustrates wisdom in this light: "Be very careful, then, how you live—not as unwise but as wise" (*New International Version*, 1978/2011, Ephesians 5:15). Wisdom comes from understanding God and his ways. Another passage in the New Testament where wisdom is illustrated as a way of being, a specific form of living, is found in 2 Corinthians 5:20. Here, the Apostle Paul affirms how we are all ambassadors of Christ and to be reunited with God. Therefore, to be wise is to be in communion with God, an act, a way of living according to God's laws.

The OT and NT passages of the Bible reveal that wisdom is attainable. In the Old Testament, the passages reveal how God gives wisdom freely to support understanding life's peculiarities, producing fruits. As discussed, wisdom in the Old Testament provides the foundation for distinguishing subtleties of viewpoints and skills about life based on a deeper insight into how and why life works the wait it does (Shoup et al., 2021). In addition, the passages reveal that wisdom is demonstrated by action, with the ability to practice it daily as the complexity of life is handled. The Bible passages in this literature assert that a vital foundation for attaining wisdom is a correct understanding of God and his laws. Hence, from a theological perspective, wisdom is the path to leading and living well. In the Bible, wisdom begins with a

relationship with God and reveals itself in the right relationships with oneself and the world. While at the same time, it supports the principles and actions indicated by God's laws.

Therefore, a wise life results in a life well-lived and the ability to continuously manage the complexity and competing demands of two worlds. A virtuous life speaks about that person, "both of the kind of being which he is when he enters the world, as a consequence of his creativeness, and the kind of being he ought to strive toward and attain to—by being prudent, just, brace, and temperance" (Pieper, 1966, p. xii). Wisdom is needed today. It is "a virtue that equips its possessors to be exceptionally skilled at living." As Sternberg (2007) declares, our world desperately needs wisdom. Influential leaders will require wisdom to successfully navigate life's ever-changing and fluid complexities.

Theology presents wisdom as a skill at living, illustrating how *sophia* is concerned with the ultimate values of life, placing God as the priority, the end goal, and *phronesis* as practical living on this earth while abiding by eternal truths. Wisdom from the theological lens is attainable, though perhaps not easy, given the constant balancing of living in two worlds. Yet, it is achievable by all who seek it. It exemplifies how living a wise life leads to fulfillment and happiness. However, one must pursue it, as we see in Proverbs 1:20-33. Wisdom is shouting, calling for all to come to her to hear her counsel and be wise. Wisdom is attainable by those who pursue it; however, we must first choose it.

Empirical Perspective on Wisdom

The empirical tradition focuses on understanding life and managing competing values and priorities to live a good life (Grossmann et al., 2020). What sets empirical studies apart from philosophical and theological traditions is the endeavor to measure wisdom and the intent to cultivate it. Interest in wisdom has grown and increased in the research community "over the last

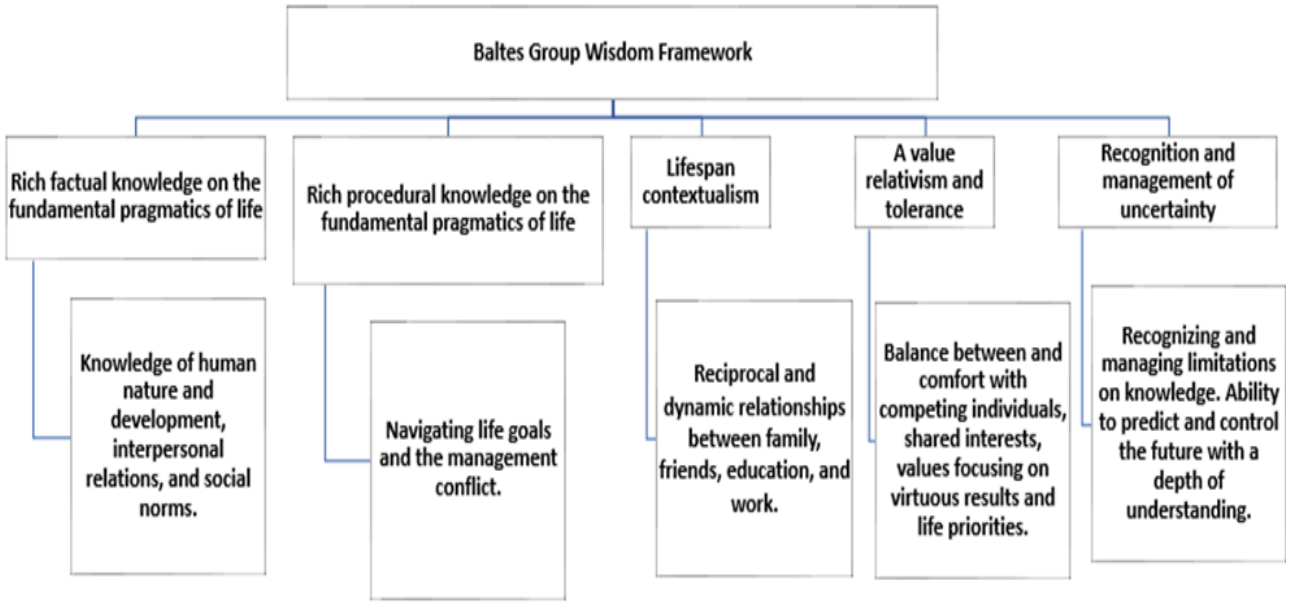
two decades. Psychological wisdom research has grown steeply in quantity as well as quality and sophistication of operationalizations and research designs" (Gluck et al., 2013, p. 405). In the empirical study, wisdom has been defined and operationalized differently. It has been explained as an expert in the meaning of life (Baltes et al., 1995; Fischer, 2010), an integrative view of self-combining cognitive, reflective, and affective elements (Ardelt, 2003, Birren & Fisher, 1990), as a deep understanding of self and caring responsiveness (Walsh, 2015), and as self-transcendence (Levenson et al., 2005). There are also various ways of measuring wisdom. The two main approaches are utilizing open-ended performance measures and self-assessment report measures. Not one has been determined to be better than the other. However, there seems to be a consensus among "researchers looking for a measure of wisdom to first decide which type of wisdom they find most central for their study: personal wisdom, general wisdom, or other-related wisdom" (Gluck et al., 2013, p. 405) and then deciding on what type of measure to use. To date, there is no agreement on how to operationalize or measure wisdom. Brown and Greene (2006) discuss the implicit and explicit theories of wisdom, which measure wisdom using different frameworks. This study discusses both approaches, focusing on the implicit theory of wisdom.

Explicit Theories of Wisdom

The Berlin group is one of the most prominent groups studying wisdom from the explicit framework. Using an explicit approach, the Berlin Group focuses on behavioral manifestations of wisdom, measuring wisdom as an expert in the meaning and conduct of life (Ardelt, 2004; Baltes & Staudinger, 1993; Baltes et al., 1995; Smith et al., 1994). Baltes and colleagues are distinguished wisdom researchers – the first to attempt to measure wisdom using standardized tests (Ardelt, 2004, Sternberg, 2008). They are the Berlin school or "the Berlin wisdom paradigm" (Baltes & Staudinger, 2000). In the Berlin school, the research on wisdom emerged

from studies on successful aging, with wisdom becoming the uniting point for subsequent research. Baltes and his colleagues presented complex life problems against five qualitative criteria. The five criteria were based on research on expertise, lifespan development, cognitive development, and cultural-historical analysis of wisdom (Pasupathi et al., 2001). Figure 1 provides a visual framework of the wisdom diagram and the criteria for wisdom-related knowledge developed by Baltes Group.

Figure 1 – Baltes Group Wisdom Framework



Baltes and Staudinger's (2000) wisdom diagram.

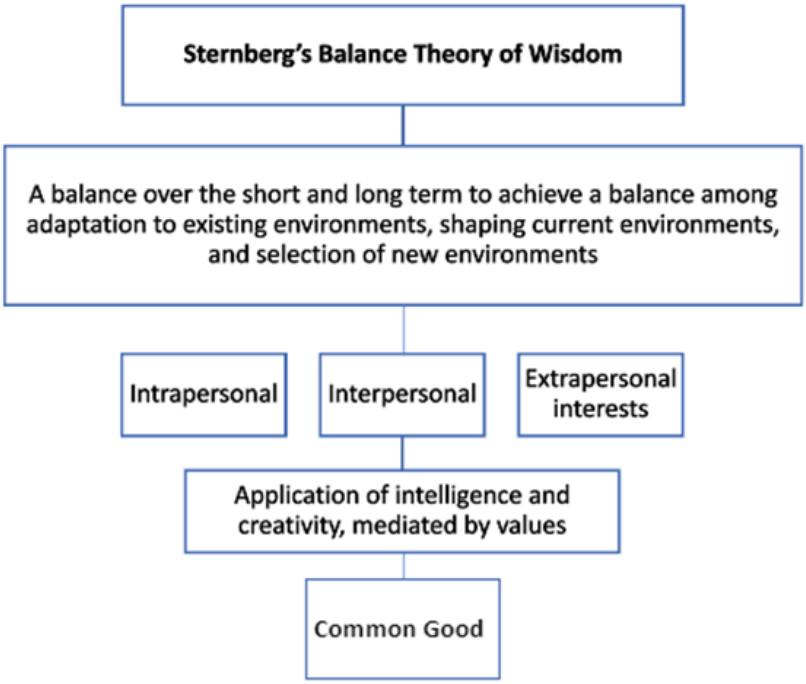
Wisdom for the Berlin school requires a rich factual knowledge of the fundamental pragmatics of life: knowledge of human nature and development, interpersonal relations, and social norms (Ardelt, 2004; Baltes & Staudinger, 1993; Baltes & Smith, 2008). Rich procedural knowledge on the fundamental pragmatics of life: navigating life goals and managing conflict. Lifespan contextualism: reciprocal and dynamic relationships among family, education, work, and friends. A value relativism and tolerance: balance between and comfort with competing individuals and collective interests and values focusing on virtuous outcomes and life priorities.

And recognition and management of uncertainty: acknowledging and managing limitations on knowledge and ability to predict and control the future with a depth of understanding (Baltes & Staudinger, 1993; Pasupathi et al., 2001). Hence, wisdom for the Berlin Group is factual knowledge measured by a trained observer utilizing narrative coding and focusing on situation analysis (Grossmann et al., 2020).

Baltes and colleagues frame wisdom as rich knowledge that includes understanding the fundamental practical aspects of life, human nature, and development, navigating life goals, and effectively managing conflict. Wisdom is balancing the competing values and interests of the individual and the collective, plus the ability to recognize uncertainty, anticipate the future, and effectively manage it. "Wisdom is the expertise in the meaning and conduct of life" (Baltes et al., 1995), available to those who seek it and intentionally want to grow in wisdom.

Another prominent wisdom researcher is Sternberg, known for the Balance Theory of Wisdom (Sternberg, 2003b, 2005, 2008). Sternberg (2003a) defines wisdom as the application of successful intelligence and creativity as mediated by values towards the achievement of the common good through a balance among (a) intrapersonal, (b) interpersonal, and (c) extrapersonal interests" (p. 152). Thus, according to this model, wisdom is practical and limited to this world. Wisdom is the application of successful intelligence and creativity as mediated by values toward the achievement of a common good. This is done through a balance among intrapersonal, interpersonal, and extrapersonal interests over the short and long term to achieve a balance among adaptation to existing environments, shaping current environments, and selection of new environments (Sternberg, 2003a, p. 188). Figure 2 provides a diagram of Sternberg's framework of wisdom, indicating the ultimate goal is the common good for all.

Figure 2 – Sternberg's Balance Theory of Wisdom



Wisdom value-meditated tacit knowledge. A balance theory of wisdom (Sternberg, 1998, p. 354)

Sternberg (2003a) asserts, "wisdom is the application of tacit knowledge not only for one's benefit but also for the benefit of others, to attain a common good" (p. 152). Furthermore, wisdom is "having the depths of wisdom, ranging from shallow to deep" (Sternberg, 2003a, p. 151). It requires balancing all the competing stories of life, "realizing that truth is not always absolute but rather evolves in a historical context of theses, antithesis, and syntheses" (p. 151). Consequently, wisdom is balancing and managing all competing priorities. Both short and long-term, adapting, selecting, and shaping the environment, with an end goal— to help people thrive.

Wisdom, according to Sternberg's model, is attainable. However, one must seek to grow and acquire wisdom by combining self-reflection with reason, intelligence, and creativity. It is also necessary to use discernment to balance competing interests and use not only intelligence,

explicit knowledge, and tacit knowledge to determine the right choice among competing equals. Thus, wisdom is a path to attaining the best outcome for all, for the common good.

The explicit theories of wisdom present it as the ability to develop skills to resolve conflict and daily crises by acquiring knowledge, cognitive skills, and personality traits, with the understanding of the need to be exposed to wise models, fluid intelligence, creativity, openness, and life experiences combined. However, the explicit theories of wisdom measure it through various calculations, primarily through problem-solving tasks where participants are asked to evaluate specific complex hypothetical scenarios. Trained coders then assess the responses according to set criteria, as in the case of the Berlin Group. Characteristics of wise people, it is argued, experience greater life satisfaction, quality of social life in early adulthood, and the ability to integrate both the cognitive and affective aspects of living.

Implicit Theories of Wisdom

The implicit theories originated in cognitive psychology, where there are assumptions and implications, and at present, no agreement on conceptualizing and measuring wisdom. The implicit studies aim to understand wisdom by evaluating people's perception of wisdom by asking them to list characteristics they believe are linked to wisdom (Intezari, 2013). A significant influence in the implicit theories of cognitive psychology has been the work of Erikson (1959), who connected personality and wisdom. Erikson's theory on the eight stages of life resulted from years of practicing as a psychoanalyst and his study of students in universities and various other settings. Erikson (1959) presented the eight stages of life, with wisdom resulting if resolved in old age. According to Erikson (1959), people who successfully resolve the eight stages would attain a deep understanding of their existence, which he describes as wisdom—the highest level of human strength and virtue (1959). Erikson's work paved the way

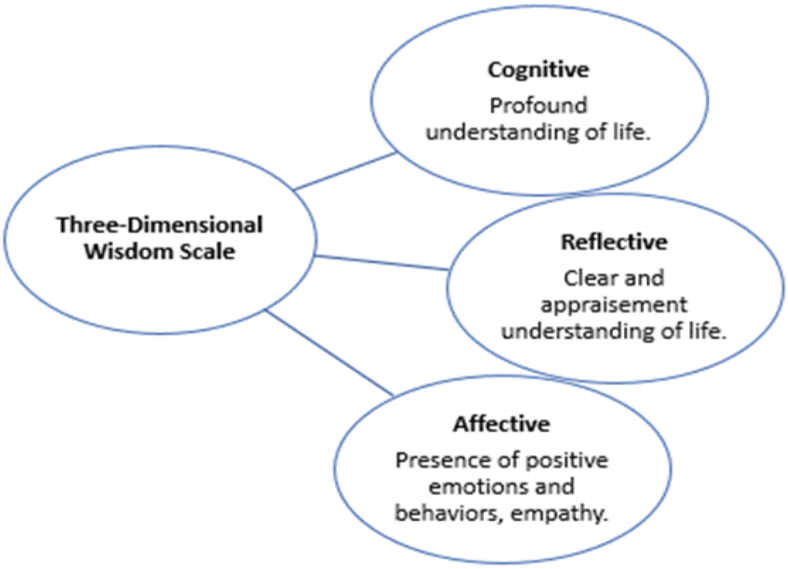
for other researchers interested in wisdom and cognitive psychology to continue understanding wisdom from this lens.

Clayton's (1976) early work has also contributed to the implicit theories of wisdom. In her dissertation on wisdom and age, she identifies three dimensions of wisdom: affective, reflective, and cognitive. Clayton (1976) elevates the importance of studying wisdom and bringing it to the forefront of empirical research. Since Clayton's dissertation, there have been many other studies on wisdom. This study acknowledges that there are numerous researchers studying wisdom from an implicit theories approach. However, given this study's design, research questions, and methodology, this research focused on the theoretical research construct of wisdom by Ardelt (2003), which is suitable for the current study. Ardelt has continued the development of Clayton's wisdom construct, defining wisdom as "an integration of cognitive, reflective, and compassionate (affective) dimensions" (Ardelt, 2020, p. 31). According to Ardelt (2020), wisdom-related knowledge seeks deeper goals, truth, and spiritual answers to the meaning and purpose of life and the human situation, emphasizing that it takes time to acquire (p.777).

In addition, Ardelt (2003) contends how her definition also aligns with Erikson's (1959) model of human development and the attainment of wisdom in old age from the successful resolution of integrity vs. despair. Ardelt (2003) argues that her basic definition has the benefit of being comparatively practical and the most compatible with most modern and ancient descriptions of wisdom. Ardelt (2004, 2010) identified common cognitive, reflective, and affective wisdom descriptors from different implicit theories of wisdom, constructing a three-dimensional wisdom scale, 3D-WS, based on her interviews with older people. Ardelt (2003) argued that "although it might be difficult or even impossible to measure wisdom per se through

a standardized self-administered questionnaire, it is hypothesized that wisdom can be assessed indirectly through indicators that are essential elements of the latent variable wisdom" (Ardelt, 2003, p.276). Therefore, Ardelt (2003) developed the 3D-WS, containing three dimensions: cognitive-deep understanding of life, reflective-clear and evaluative understanding of life, and affective-presence of positive emotions and behaviors. Previous studies support this study design of self-assessment measures (Ardelt, 2003, 2020; Gluck et al., 2013; Webster, 2007). Figure 3 presents a diagram of Ardelt's 3D-WS construct, noting each subdivision's initial indicator.

Figure 3 – Ardelt's Three-Dimensional Wisdom Construct



Since its inception, several studies have been conducted utilizing the 3D-WS. However, given the length of the measure with 39 items, a new abbreviated 3D-S scale was developed in 2017 by Ardelt and colleagues (Thomas et al., 2017). The new condensed version of the 3D-WS consists of 12 items, four in each subdimensions: cognitive, reflective, and affective. The new abbreviated instrument was tested for validity and reliability, and the results indicate that the 3D-WS-12 can provide efficient and valid assessments of wisdom within research surveys.

Appendix E: provides a sample of the Three-Dimensional Wisdom Scale-12. The scale's succinctness with 12 items provides a practical platform for assessing wisdom by examining the cognitive, reflective, and affective dimensions.

From the implicit view, and focusing on Ardelt's framework, wisdom is presented as a characteristic developed over a lifetime with intentionality, attainable by any individual willing to do the work necessary to grow in wisdom. As Ardelt (2003) affirms, "it might be that wisdom only increases with age for those people who actively pursue the development of wisdom and engage in the practice of (self-) reflection to overcome their subjectivity and projections" (p. 315). Thus, wisdom requires intention. It is primarily measured by self-assessment measures that lend themselves to time constraints while minimizing the burden on the study's participants.

Supplementary Studies on Wisdom

Interest in wisdom in psychology, social sciences, and education continues to grow (Grossmann et al., 2020). New approaches to understanding and measuring wisdom continue to emerge as interest increases. For example, researchers such as Peterson and Seligman (2004) gathered data through "brainstorming" and a dialogical process, with notable scholars presenting yet another framework to understand wisdom. They engaged in an exhaustive literature search for constructs and existing inventories associated with wisdom, such as works by ancient philosophers, religious texts, and references to wisdom in popular culture. They conceptualize wisdom as a virtue drawn from the philosophical tradition and the work of Erikson, the Berlin Wisdom, and Sternberg. In the end, they described wisdom as knowledge hard fought for and then used for good, similar to Socrates' examined life (Peterson & Seligman, 2004; Shoup & Troy, 2021). Peterson & Seligman present five-character strengths associated with wisdom: creativity-original and novel insights, curiosity-intrinsic openness to novel experiences, open-

mindedness-flexible and broad-minded critical thinking, love of learning-vitality and motivation to acquire new knowledge and skills, and perspective-empathic and long-view understanding of life (Peterson & Seligman, 2004, Shoup & Troy, 2021). New frameworks on conceptualizing wisdom continue to emerge, supporting and reflecting the importance of wisdom in research.

In 2019 researchers met in Canada at a Toronto Wisdom Task Force Meeting to identify common themes in wisdom-related psychology science and scholarship. The intent was to examine if there were common views across a wide range of wisdom operationalizations in social, behavioral, and cognitive sciences to lay the foundation for an agreed theoretical framework for wisdom research (Grossmann et al., 2020). After surveying 44 representatives from different countries and analyzing the data gathered, the researchers proposed a "common wisdom model, defining wisdom's psychological characteristics as morally-grounded excellence in social-cognitive processing" (p. 125). Their findings strengthen the consensus in the empirical studies that anyone can attain wisdom and the need for wisdom in the world. They concluded that additional work needs to be done by future psychological scientists who can add to their findings, establishing a language that can be used across different levels of analysis and aiming to further our understanding of how to nurture wisdom (p. 125).

Karami et al. (2020), in their study, reviewed 50 articles from psychology, leadership, management, and education, intending to examine areas of agreement among conceptions of wisdom. Their findings resulted in their presentation of a Polyhedron Model of Wisdom. Suggesting "components that characterize wisdom including knowledge management; self-regulation; altruism and moral maturity; openness and tolerance; sound judgment and decision making; intelligence and creative thinking; and dynamic balance and synthesis translated into action" (Karami et al., 2020, p. 253). They concluded that wisdom could be fostered through the

development of the elements of wisdom. Sternberg and Karami (2021) presented a similar framework for understanding wisdom. The wisdom framework comprises the "6P": purpose, press, problems, persons, processes, and products (Sternberg & Karami, 2021). They argue that these six components of wisdom explain how to develop wisdom, contending that a complete model of wisdom must include all "6P". The interest in wisdom continues to expand, as evidenced by the emergence of new frameworks for understanding wisdom. Though there is no consensus on a framework for understanding wisdom, all studies point out that cultivating wisdom is more important than ever.

Researchers in the social sciences agree on the benefit of attaining wisdom (Alvy, 2005, Ardelt, 2004; Baltes & Staudinger, 1993; Pasupathi et al., 2001). In addition, there is agreement that wisdom can be learned and acquired (Grossmann, 2017; Grossmann et al., 2020). Wisdom is critical to understanding life, living well, coping with central problems, attaining happiness, and avoiding the dangers humans face (Ayoko, 2021; Czarnocka, 2016, Fisher, 2010; Shoup et al., 2021). Charan (2005) stresses the importance and benefits of companies investing their time and energy today into the effective leader of tomorrow. Supporting the value of developing influential leaders brings value to the company. The lingering questions are how to build wise leaders and what is the most effective approach to leaders' growth and development areas. As asserted by Sternberg (2003b), "if there is anything this world needs, it is wisdom" (p. xviii)—wise leaders.

Some researchers argue that "the implicit and explicit psychological theories of wisdom…are intertwined" (Baltes & Staudinger, 2000, p. 124); however, as illustrated, the explicit and implicit theories conceptualized and measured wisdom differently. The explicit theories focus on presenting wisdom as a rich knowledge of the fundamentals of life and the skill

to navigate the complexities of life, utilizing hypothetical scenarios eliciting a response from the participants and coded by trained evaluators. The implicit studies focus on constructing wisdom from a personal traits perspective, obtained through personal life experiences and self-reflection over time. They are measured by self-assessment tools, such as Ardelt's 3D-WS scale. Although both approaches conceptualize and measure wisdom differently, there are commonalities between the two. Both theories agree that wisdom can be measured, better understood, and attainable by anyone seeking it. Perhaps it is not easy, but possible, and more research is needed to understand, grow, and foster the highest enlightenment of understanding our world desperately needs.

Wisdom and Leadership

Wisdom and leadership should go hand in hand; unfortunately, that is far from reality. To date, few studies link wisdom and leadership or address how to grow, preserve and support wisdom in leadership. Yang (2011) conducted a research study of seventy Taiwanese leaders nominated as wise, affirming the benefits of wisdom and leadership and that the benefits surpass the leader-follower relationship, impacting society's advancement. The study offered several recommendations, adding wisdom in evaluating and recruiting leaders and asking applicants to assess their previous cognitive interactions. Incorporating wisdom into the training of leaders, such as including the training of leaders to exercise self-reflection and emphasizing leadership-related wisdom in society. Yang (2011) concludes with several unanswered questions about leadership, wisdom, and culture, such as "is promoting good lives for society a valid criterion that should be added to the overall evaluation of leaders' performance?' (p.630), thereby contending the need for more research on how to nurture wisdom in leaders.

Furthermore, Tumpa (2012) links wisdom and leadership literature, explicitly looking at transformational leadership literature related to wisdom. Tumpa (2012) argues how wisdom is associated with transformational leadership, acknowledging the need for additional research on wisdom and leaders focused on the cultural aspect of wisdom and leadership. Wisdom is vital for successful leadership. Kouzes & Posner (2017) argue that the practice leaders use to transform values into actions, visions into realities, obstacles into innovations, separateness into solidarity, and risks into rewards (Kouzes & Posner, 2017, p. xi) are the key to effective leadership, therefore wisdom is required. Smythe and Norton (2011) contend that 'know how' is not sufficient; strong leadership requires wisdom that is enacted at the moment" (p. 1). Outstanding leadership requires wisdom to effectively manage the complexities of leading, the daily ethical dilemmas, and the discernment to choose among equals. Leaders need to be ready to be flexible and adaptable and be highly supportive in a personal relationship when needed, yet capable of making a quick, authoritative decision when the situation requires it (Gardner, 1990, p. 26).

Moreover, researchers in both the wisdom and leadership field have examined the relationship between various factors influencing the development of leadership skills or the ability to grow in wisdom, such as age, gender, education, spirituality, or cultural context (Ardelt, 1997; Avolio, 2007; Herbst, 2020; Lau,2011; Rocha & Pinheiro, 2021; Zacher et al., 2011). For example, early studies such as Ardelt's (1997) explored the relationship between wisdom, life satisfaction, and age, concluding that additional research was needed to test the relationship between wisdom and old age. Baltes and his team, in their early works, also explored the relationship between aging and wisdom, concluding wisdom and age are not directly correlated (Baltes et al., 1992). They contend that acquiring "an expert system of wisdom…requires a concerted personal and societal investment of considerable time, effort,

motivation, and structured experience" (Baltes & Smith 2008, p. 118). Other studies have also explored the context in which wisdom can grow, such as in community with others and the developing of long-term relationships (Auer-Spath & Glück, 2019). Currently, studies have concluded that wisdom and leadership are best cultivated by exercising certain habits and creating the context to nurture these factors.

There is consensus that being an effective leader or growing in wisdom is not limited to any personal trait such as education, gender, age, or level of education (Jones, 2014; Lowe et al., 2017; Northhouse, 2018)— leadership and wisdom are available to anyone who pursues it. However, some studies indicate that particular components may facilitate the attainment of wisdom or the development of excellence in leadership, such as mentoring, networking, and self-reflection (Brown, 2002; Schipani et al., 2008; Turner-Moffatt, 2019; Zenger & Folkman, 2019). Given the interest in research in exploring multiple variables about leadership and wisdom, the present study also examined gender, faith, years of experience, level of education, and environment as possible factors relating to leadership and wisdom to contribute to past research efforts on this topic.

Reading and Leadership

Reading has been associated with supporting a deeper understanding of life and the development of vital skills of leadership (Shoup & Hinrichs, 2021). It provides a platform to learn of others' experiences and internalize the material, engaging the cognitive and reflective abilities while providing a point of reference and a vocabulary for a fruitful life. An example of the value of reading for leading is observed in four United States vice presidents who developed a passion for books: John Adams and Thomas Jefferson, lawyers; Theodore Roosevelt, a rancher and writer; and Harry S. Truman, a judge (Dunlap, 1989, p. 5). President Theodore Roosevelt

was known to read at least one book a day, and Adams was known to have said he could not live without a book (Dunlap, 1989, p. 7). Reading provides the knowledge base and skills a leader needs to lead effectively. It supports a leader's abilities and skillset to understand life's peculiarities and universals.

Reading accelerates knowledge acquisition, provides self-reflection, and the ability to grow in wisdom, which results in the ability to become a wise and effective leader. President Truman was an avid reader and wrote that "readers of good books, particularly books of biography and history, are preparing themselves for leadership. Not all readers become leaders. But all leaders must be readers" (Dunlap, 1989, p. 9). Thus, leaders should be readers to support their understanding of life's peculiarities and personal development as human beings. Furthermore, the Don Quixote Effect has demonstrated that people act and think based on what they read and watch (Shoup & Hinrichs, 2021). Therefore, a leader should follow the consummate example of our nation's past leaders, prudently seeking to read constructive and valuable writing. It has been shown that there is power in reading—wise leaders read.

Cultivating Wisdom

Some social science researchers have examined to what degree wisdom can be fostered and cultivated in different settings (Ardelt, 2020; Ferrari & Kim, 2019; Ferrari & Potworowski, 2008; Kupers & Statler, 2008; Sternberg & Hagen, 2019). Ardelt (2020) conducted a short-term longitudinal study among college students, exploring the association between wisdom development and the stress experienced by the students. The study concluded that, on average, the students who attended the "12 growth classes significantly increased in wisdom" while the students who participated in the "eight control classes decreased in wisdom" (Ardelt, 2020, p. 30). Ardelt (2020) discusses the study's support of research on the possibility of cultivating

wisdom at the university level, emphasizing the importance of providing students the time for self-reflection and mindfulness conditions supported by other studies as well (Ardelt, 2020; Brown, 2002, 2004; Bruya & Ardelt, 2018).

Researchers emphasize the importance of self-reflection, critical thinking, and examining one's life to grow in wisdom as factors necessary to foster wisdom (Ferrari & Kim, 2019). Brown (2004) discusses how "the conditions that facilitate the development of wisdom by directly or indirectly stimulating the learning-from-life process are the student's (a) orientation to learning, (b) experiences, (c) interactions with others, and (d) environment" (p. 137). Positive psychology studies point to cultivating wisdom over time by exercising certain practices. Likewise, studies exploring the development of wisdom in higher education settings emphasize professors' vital role in supporting a culture where students can grow in wisdom. Jones (2014) argues that "because of their association with academic communities, higher education lecturers are in a position to give their students wisdom in a certain realm" in a community of academia.

Furthermore, Kupers and Statler (2008) contend that wisdom can be developed at an organizational level, presenting a model for fostering wise leadership practices in modern-day organizations (p. 379). They examined the term "emotional ecology," or "the 'wisdom of feelings," explaining how a leader's ability to manage their emotions "is intrinsic to many relevant processes within the organization and leadership practices" (Kupers & Statler, 2008, p. 384). They present a phenomenological and integral approach to practical wisdom in organizations, a "concept of an integral practice, covering various levels and spheres of wisdom in organizations" (Kupers & Statler, 2008p. 380). The model has several essential components: individuality, collectivity, consciousness, behavior, culture, and systems. Kupers and Statler (2008) argue the findings' primary implication was identifying specific conditions for developing

each element of the wisdom model, such as cultivating reflective, dialogical conditions and personal relationships with members of the organizations (p.391). Research studies in social sciences and leadership appear to elevate the vital aspect of self-reflection, examining life experiences, and being in the company of others, but most notably, choosing to grow in wisdom as essential to cultivating wisdom.

According to Smythe and Andrew (2011), wisdom can only be learned through experience; emerging leaders need to be exposed to the play of leadership while being mentored by seasoned leaders willing to share their wisdom (p. 1). A leader needs to engage the cognitive, reflective, and affective capacities to support nurturing wisdom. To have the time to reflect and grow in understanding, as argued by researchers such as Ardelt (2020) and Sternberg & Hagen (2019), reflection and evaluation of life experiences are needed to grow in wisdom. A leader must be committed to ongoing self-growth and self-reflection, applying the knowledge gained to their leadership practice (Northouse, 2018, p. 331). Wisdom and leadership go together; wise leaders must listen and connect with those they lead. “It has been said that the heart has a mind of its own. Good leaders listen” (Bolman & Deal, 2017, p. 421). Bazerman and Moore (2012) quote Confucius: “By three methods we may learn wisdom: First, by reflection, which is the noblest; second, by imitation, which is the easiest; and third, by experience, which is the bitterest” (p.216). Leaders can be wise and create an environment where wisdom can be cultivated. The research community agrees that leadership theory is a vibrant young field of study, robust and still growing, evolving, and progressing (Goethals & Sorenson, 2006; Shoup, 2016; Riggio, 2013). As Raven (2008) contends, "it is reasonable to conclude that a leader who is more aware, either formally or informally, of the various options in social power strategies will be more successful and effective" (Raven 2008, p. 10). A wise leader can successfully

understand the complexity of leading and the nature of working in an ever-changing context. As the compass is to a boat, so wisdom is to leadership; it guides the captain to successfully manage the numerous considerations required to arrive safely at the harbor.

Methodology Review

Research is driven by the study's design, methods, and philosophical assumptions (Creswell & Creswell, 2018). As previously discussed, this researcher acknowledges a postpositivist worldview, which is a belief that *causes* determine the effects or outcomes of the problem studied (Creswell & Creswell, 2018). The population selected for this study were higher education leaders who, understandably, have little time to spare to participate in surveys. The study design was a pre-post-survey design focused on gathering statistical data. The method of this study and proposed questions indicated that an ANOVA (factorial and One-Way) was the appropriate statistical test to answer the stated hypothesis. An analysis of variance, or ANOVA, is utilized when one factor or treatment variable is explored and comparing means for more than two groups (Salkind, 2020). The difference between One-way ANOVA and factorial analysis is that a One-way ANOVA is a test focusing on just one factor with more than two levels. In comparison, a factorial analysis is used to explore more than one independent Variable (Salkind, 2020). Therefore, the approach of this study is a quantitative experimental survey design approach with various ANOVA statistical tests conducted to answer the stated research questions and hypothesis.

Summary of the Research Literature and its Implications for the Study

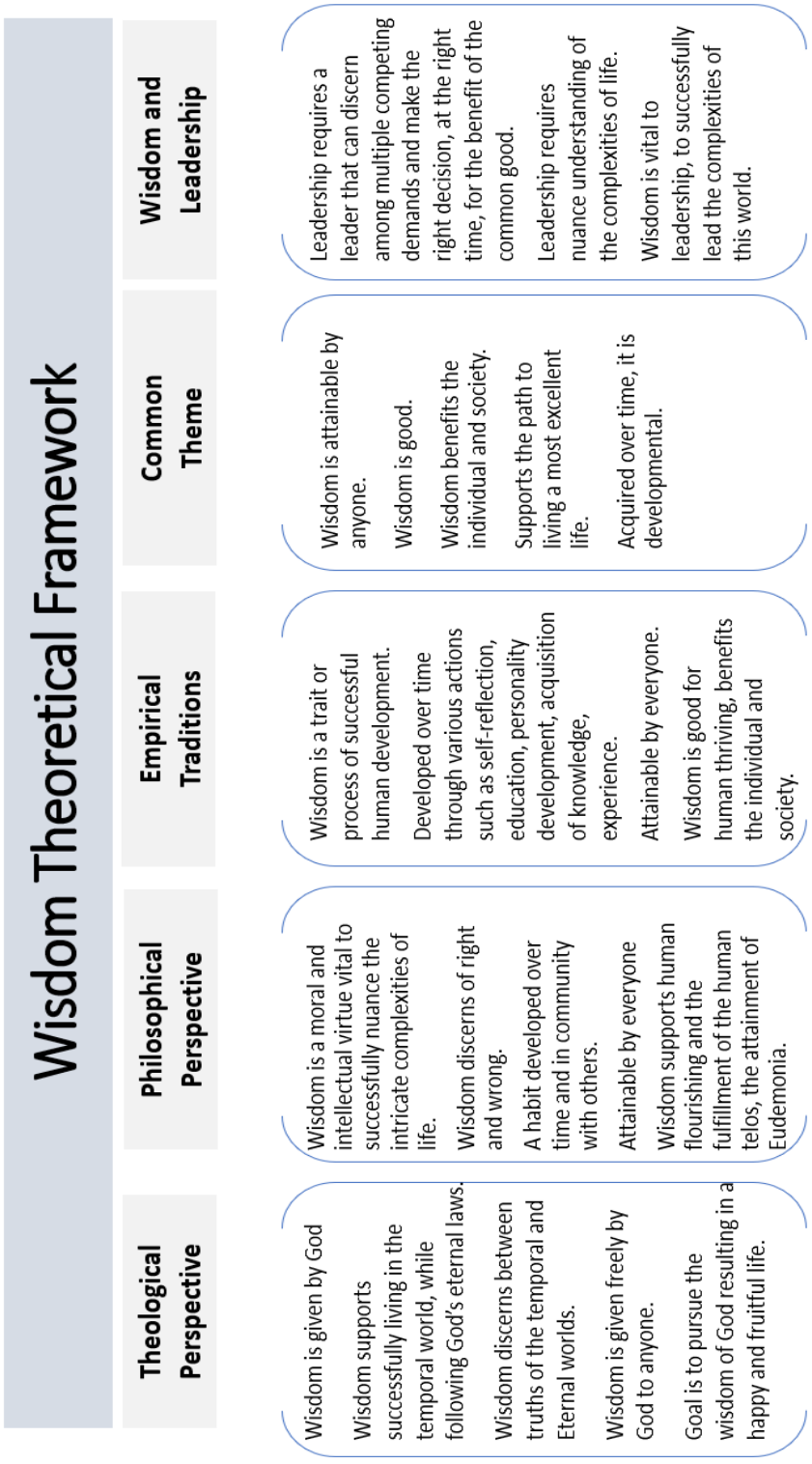
This literature review has demonstrated an overarching theme in the philosophical, theological, and empirical studies, wisdom benefits society, and wisdom is attainable by those who pursue it—albeit not effortlessly but achievable (Brown & Greene, 2006; Charan, 2005;

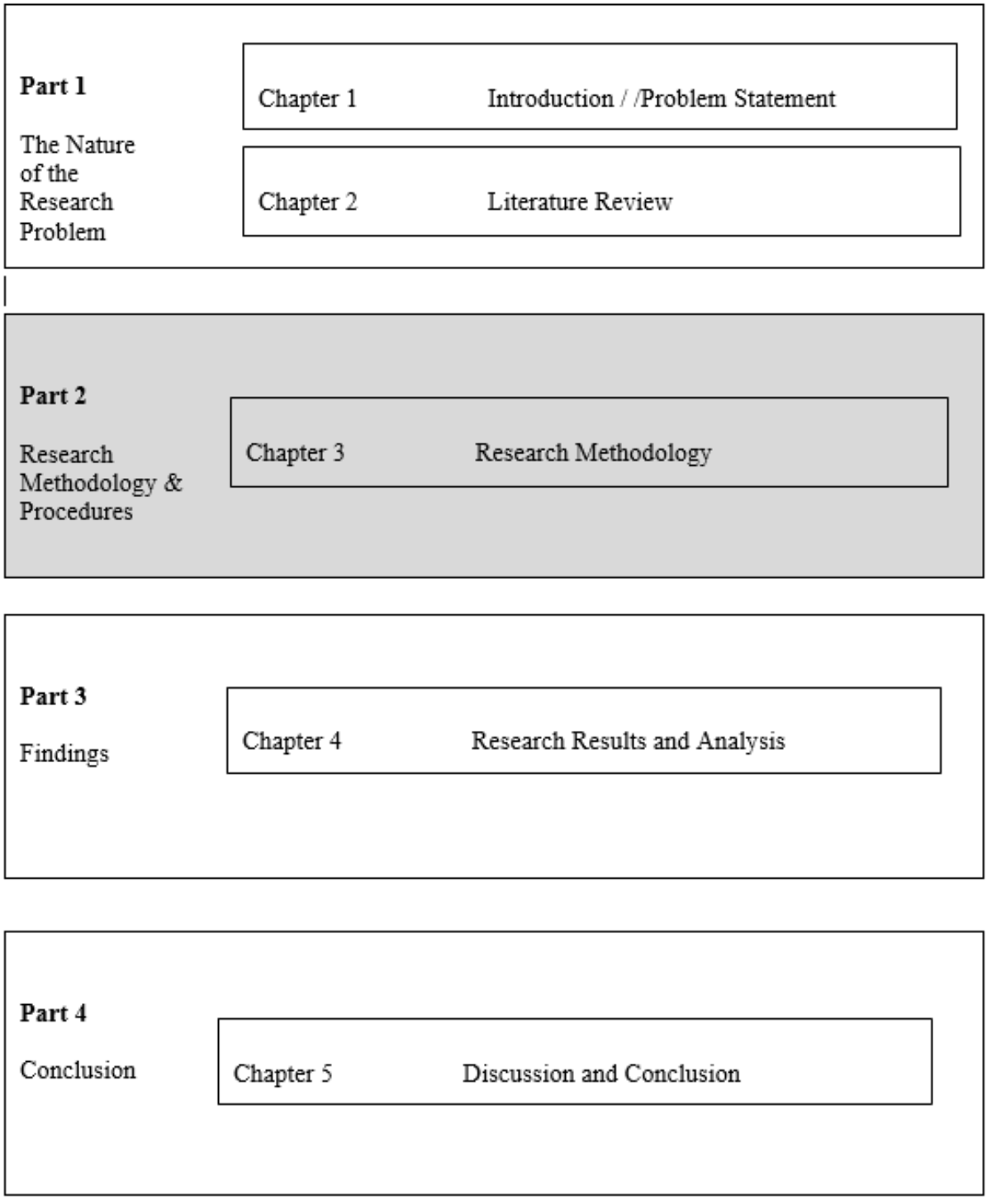
Cusher & Menaldo, 2021; Dell, 2008; Jeste & Vahia, 2008). Considering the world's challenges and acknowledging that wisdom is the highest enlightenment of understanding, wisdom is critical for our leaders to lead successfully. It is vital to prepare future leaders and human citizens to be intelligent, creative, wise, ethical, and concerned about the well-being of all people regardless of race, ethnicity, sexual-gender, cultural, or religious background (Ardelt, 2020). Leaders can and must develop the necessary abilities to learn, practice, and teach wisdom (Chen et al., 2011; Ferrero et al., 2020; Shoup et al., 2021; Sternberg, 2008). Wisdom is multifaceted and multidimensional; future studies are needed to understand and cultivate it (Ardelt, 2003, Sternberg, 1985). Leaders are lacking in wisdom. As Schwartz and Sharpe (2010) stated, we are deteriorating the environment where wisdom grows with policies and regulations.

Philosophy, theology, and empirical studies illustrate an overarching theme—wisdom is essential for a life well-lived and for the flourishing future of our world. Wisdom has been associated with a better life, physical and mental health, life satisfaction, mastery, and resilience (Thomas et al., 2017). Wisdom deals with values; it requires judgment to discern the right decision and attain an extraordinary life (Ackoff, 1989; Alvy, 2005; Grassl, 2017, Staudinger et al., 1998; Webster, 2003a, 2007). Studies demonstrate that wisdom can be measured using reliable measuring tools, stating that more research is needed (Baltes et al., 1995; Glück et al., 2013; Keyes, 1983). There is consensus that wisdom can be attained and is a benefit to leadership, but also that more research on wisdom is needed (Ardelt, 2020; Glück, 2017; Intezari, 2013; Staudinger & Baltes, 1996; Yang, 2008). Figure 4 synthesizes the three frameworks discussed in this literature review. It presents an overarching theme among the three theoretical models and the bridging wisdom and leadership.

Wisdom is declining in our world, where we desperately need to cultivate it. Stories abound about the lack of wisdom from our world's leaders. Today, there is no clear path to grow and nurture wisdom in our leaders. Though it appears that wisdom is desperately shouting in the streets, ready to support human flourishing, it is falling on deaf ears. This study intended to support and contribute to the urgent need to foster wisdom in our society and give it the prominence it deserves by exploring the reading habits of leaders in higher education and if exposing them to the nature of wisdom will result in higher wisdom scores.

Figure 4 – Wisdom Theoretical Framework

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Research Methodology

Chapter Overview

This chapter describes the research methodology and procedures. The purpose of the study is reintroduced, followed by an explanation of the process and methods. Next, the participants, procedures, and measures utilized are discussed. Lastly, the role of the researcher is addressed, and a discussion on data collection and analysis of the study is discussed.

Reintroduction to the Purpose of the Study

There is a growing interest in leaders understanding and acquiring wisdom. The research community agrees wisdom benefits individuals and society and can be readily attained under certain conditions. Furthermore, there is a consensus that wisdom can be measured, although there is a debate on the best way to measure it, in part because of different definitions. A resounding agreement is that more research on wisdom is needed, especially learned or wisdom-related knowledge. Therefore, the present study aims to contribute to the current body of knowledge by exploring the possibility that wisdom can be learned systematically.

Measuring wisdom can prove challenging. Ardelt and her colleagues conceptualize wisdom as a latent variable integrating cognitive, reflective, and affective dimensions. They argue this definition is compatible with most modern and ancient conceptualizations (Thomas et al., 2017). They assert, "although there are circumstances in which researchers and clinicians may choose to focus on separate domains of wisdom, a marker of the general construct may be all that is required" (Thomas et al., 2017, p. 72). The 3D-WS-12 scale has been used in different cultural groups and various age groups ranging from children, adolescents, and young and middle-aged adults (Thomas et al., 2017, p. 72). Thomas et al. (2017) stated the items for the 3D-WS-12 were selected "balancing concerns for reliability, internal structure, and content

representativeness. Overall, results suggest that the abbreviated 3D-WS-12 can provide an efficient, reliable, and valid assessment of wisdom" (p. 75). The present study utilized this measure.

Research Methods

This study aspired to describe the relationship between exposure to reading material on wisdom and the effect on higher education leaders' self-reported wisdom and participants' reading habits and responses to the intervention. A pretest-posttest control-group design was utilized, randomly assigning participants to either the experimental or the control group. The control group did not receive the educational intervention, and the experimental group did. This study examined the effect of exposure intervention; by reading a condensed chapter on wisdom from the book *Pursuing Wisdom: A Primer for Leaders and Learners (Shoup et al., 2021)* and leaders' self-reported wisdom using the abbreviated 3D-WS 12-item self-assessment wisdom measure. This measure developed by Ardelt has been tested for "measurement precision, internal structure, and content validity, factor analytic methods, and expert judgment, with results suggesting that the 3D-WS-12 can provide efficient and valid assessments of wisdom within the context of epidemiological surveys" (Thomas et al., 2017, p. 71).

The data was collected utilizing a pretest-posttest. A quantitative random sample method was employed to support acquiring participants for the study. The use of random sampling methods decreases bias. Furthermore, qualitative data were collected utilizing open-ended questions to ascertain participants' reading habits and responses to the intervention.

Pretest-Posttest Control-Group Design

"A traditional, classical design, this procedure involves the random assignment of participants to two groups. Both groups are administered a pre-test and a post-test, but the treatment is provided

only to experimental Group A" (Creswell & Creswell, 2018, p.69). A timeframe between pre- and post-survey of four weeks was allocated considering participants' time constraints and minimizing any possible effects between pre-survey on post-survey data.

Experimental Group O----------X----------O

Control Group O----------O

The present study was concerned with the effects of exposure to instructional reading material on wisdom and the impact on self-reported wisdom. This study used similar designs utilized by researchers using self-assessment tools to measure wisdom (Ardelt 2000; Webster 2003b).

Participants

Participants were identified by employment title at a four-year university and were contacted via e-mail. Participants were vice presidents, deans, chairs, and directors in private and public-land grant institutions. A sample of 2,775 higher education leaders was collected from public and private four-year universities. The current study only included participants who met the definition of higher education leader and worked in a higher education institution.

This study utilized a convenience sample method to identify participants serving as leaders in different universities in the United States. A general question, "university of (state name)?" was entered on the Google website. The first university from the Google search was then selected to attain participants' names and contact information. When participants' data was unavailable on the university's website, the second university listed on the Google search was selected. The above process was followed for each successive state. A pattern was noted during the Google search; Google first provided the name of each state's public land universities before indicating the contact information of another university. Participants were recruited from all fifty states, and four private universities known to this researcher were also included in the study.

Subsequently, resulting in 47 public land grants, three public, and four private universities. Participants were recruited via e-mail, noting the details of the research study *(see the attached version of the emails).* All recruited participants were invited to participate in the study's first phase. Participants were randomly assigned to the control or experimental group in the study's second phase.

Procedures

Institutional Review Board. The study was submitted to California Baptist University's Institutional Review Board (IRB) for full ethics approval before recruitment began.

Power Analysis. A preliminary power analysis was conducted to determine the minimum sample size required to accept the statistical outcome and establish sufficient power. G*Power version 3.1.9.4 software was utilized to perform the power analysis to analyze variance. The statistical test selected was an ANOVA with the power analysis set to achieve an 80% power level. The α err probability was set to 0.05, the effect size f was set to .25, and a two-group analysis was entered. The total sample size recommended was 269 participants.

The following are the procedures and instrument utilized in the study to ensure validity, reliability, and ethics.

Instrument and Measures

Three-Dimensional Model (3D-WM-12). The abbreviated 3D-WS-12 model is an abbreviated model of the 3D-WM measure "used to define and operationalize wisdom as an integration of cognitive, reflective, and compassionate (affective) dimensions" (Ardelt, 2004). According to Ardelt (2020), "the 3D-WS-12 is compatible with most expert and lay definitions of wisdom (Bangen et al.,2013; Bluck & Glück et al., 2005) and integrates wisdom definitions from both Western and Eastern cultures (Ardelt, 2011)." The 3D-WM-12 is on a 5-point scale (1 = strongly

agree and 5 = strongly disagree or 1 = definitely true of myself and 5 = not true of myself), consisting of cognitive, reflective, and compassionate (affective) dimensions (Ardelt, 2020). Furthermore,

> "Items for [the] newly developed 3D-WS-12 were chosen balancing concerns for reliability, internal structure, and content representativeness. Overall, results suggest that the 3D-WS-12 can provide efficient, reliable, and valid assessment of wisdom. The 3D-WS-12 meets our aims to develop a scale that can be administered quickly within the context of epidemiological surveys, minimizes administration burden, and focuses on the higher-order construct of wisdom" (Thomas et al., 2017, p. 75).

Demographic and Open-Ended Questions

Additionally, to collect demographic information, participants were asked the following questions: gender, highest degree earned, the field of study for their highest degree, years in their current leadership role, type of institution, and religious belief (do you consider yourself religious). Moreover, to ascertain participants' perceptions of reading and leadership habits, participants in both groups were asked the following two open-ended questions: please list what books you have read since the first survey and what is your go-to book for practicing wise leadership. The experimental group was also asked the following two questions related to the condensed literature on wisdom intervention: please indicate what percentage of the PDF file literature on wisdom and leadership you read, and please indicate if and how the reading material helped you better understand and practice wisdom. Data was gathered utilizing the Qualtrics system and is presented in chapter four.

Role of The Researcher

A researcher has a vital role in conducting ethical and sound research, as evidenced by numerous articles addressing the importance of a researcher abiding by ethical principles of sound research. Holmes (2020) argues that a researcher's positionality is vital and must be addressed in any sound research, as this inevitably influences the research. This researcher acknowledges that my positionality in this research has influenced my research in the following manner. First, I am a post-positivist; I believe there is a single reality that can be measured. Furthermore, given my current field of study in the Ph.D. program, I am interested in higher education leaders. Secondly, in my recent development as a scholar, I see myself as part of the field of higher education. In my novel understanding, I believe others also see me as a beginning scholar. Though I understand and acknowledge my view and identity will continue to grow with time, through experience and insight. Thirdly, I know my interest and context impact my research. And lastly, my positionality in the current topic and study will continue to develop, requiring ongoing self-reflection and insight.

Additionally, a researcher must abide by the ethical obligation to the research community, society, and, most importantly, to the people who participate in our studies. A researcher must use rational decisions and use practical wisdom. Remember that each person must be treated with respect, the importance of treatment with care, provide informed consent, and always weigh the benefit versus the burden of the study. A researcher must remember that everyone should be treated respectfully and that conducting research is the highest honor. Finally, a researcher must use scientific reasoning and remember that there are multiple stakeholders, time, responsibilities, conflicts of interest, and ethical responsibilities. Consistently reporting accurate findings regardless of the outcome and wisely interpreting results while being vigilant and not falling prey to p-hacking or misleading or presenting muddled findings (Holmes,

2020; Grenville, 2021; Nuzzo, 2014; Pashler & Harris, 2012). A researcher's role is pivotal; a researcher is a guardian to ensure research will do good and not harm individuals in the study and society.

Data Collection and Analysis

This study focused on higher education institutions in the United States, in private and public sectors.

Data Collection

The following steps were followed to conduct the study:

- E-mails were composed noting the research details and inviting participants to an instruction on wisdom. For a sample of the e-mails to the participants, see the following appendices:
  - Appendix A: Informed Consent / Recruitment E-mails
  - Appendix B: Second Phase Control Group-Post Survey
  - Appendix C: Second Phase Experimental Group-Excerpt on Wisdom
  - Appendix D: Second Phase Experimental Group-Post Survey
- Participants were provided with the required information to obtain informed consent.
- All participants in both groups were asked to complete the 3D-WS-12 measure. The goal was to obtain a baseline from all participants on self-reported wisdom.
- Participants were randomly assigned to the control and experimental groups.
- Next, in collaboration with the lead author, participants in the experimental group were provided a condensed version of chapter 4 of the book, *A Primer for Leaders and Learners, Pursuing Wisdom*. Participants were provided three weeks to read the condensed chapter version.

- Five weeks after completing the pre-test, participants in both the experimental and control group were asked to complete a second 3D-WS-12 measure and additional (two for the control group) and (three for the experimental group) open-ended questions.
- Data was collected using Qualtrics for both the 3D-WS scale and open-ended questions. SPSS was used to conduct statistical analyses.

Data Entry. The collected data was downloaded to Microsoft Excel for data cleaning and coding. Any missing data was evaluated before excluding it from the final analysis. Finally, data was inputted into the SPSS database system for data analysis.

Statistical Analyses

The following statistical tests address the following hypothesis tested in this study:

H_0- There is a difference between self-reported wisdom among higher education leaders who participate in an abbreviated curriculum on wisdom and those who do not.

H_1- The attainment of wisdom can be learned in a systematic approach.

Statistical Test H_1- ANOVA

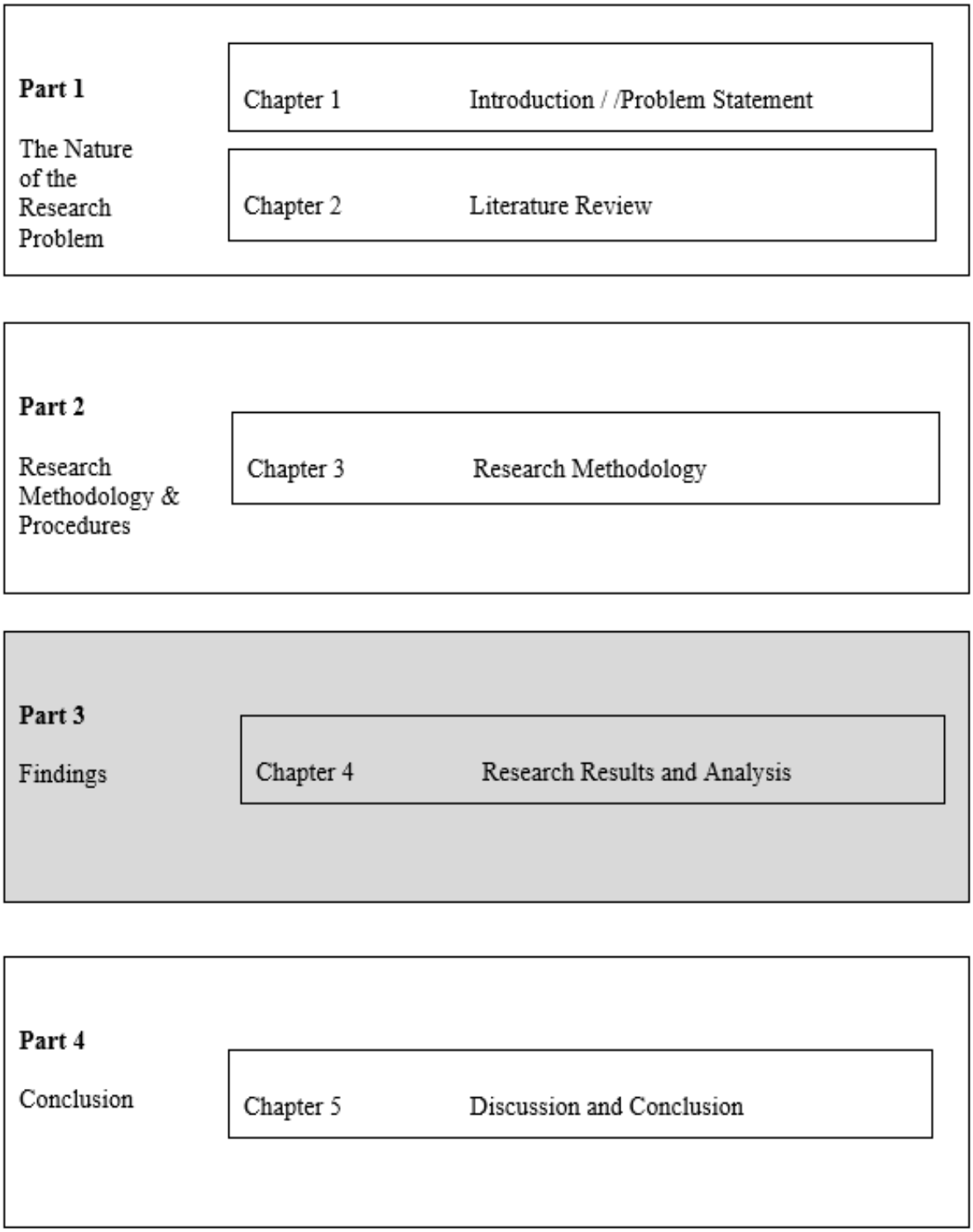
H_2- The number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower.

Statistical Test H_2- Factorial ANOVA

H_3- Self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

Statistical Test H_3- One-Way ANOVA

The collected data was downloaded from Qualtrics Database and into Microsoft Excel to be formatted and cleaned before exporting it into the SPSS database to support the required formatting of the SPSS program and successfully conduct statistical data analysis. The qualitative data collected was also downloaded from Qualtrics Database and into Microsoft Excel for further analysis.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Research Results

Chapter Overview

This chapter presents the study's results, including participants' descriptive characteristics, frequency data, and hypothesis analysis.

Analysis of Data

Descriptive Characteristics of Participants

The participants were vice presidents, deans, chairs, and directors in higher education, both in the public and private sectors. A population sample size totaling 2,775 was collected. Table 1 provides detailed information regarding the number of participants in both study phases.

Participants were invited to participate in the study using the Qualtrics database program with a survey link provided. Of the initial 2,775 sample size, 244 participants consented to participate in phase one of the study, completing the pre-survey. Of the 244 participants in phase two, 13 had significant missing or incomplete data; hence, they were excluded from phase two of the study. A total of 231 participants participated in phases one and two of the study.

Table 1

Total Participants in the Study: Phases One and Two

	Recruited	First Phase	Second Phase	Control	Experimental
Sample Size	2775	244	231	115	116
Mortality *	2531	0	0		
Missing Data		13			
Total Participants	244	231			

* *Note.* The study's first phase experienced a 91.17% mortality rate.

For phase two of the study, 231 participants were randomly assigned to either the control or the experimental group, 115 participants were assigned to the control group, and a total of 116 participants were assigned to the experimental group. Table 2 provides detailed information on phase two of the study. Attrition was experienced in the second phase of the study. Of the 115

participants assigned to the control group, 91 completed the post-survey, and two participants had significant missing data and were excluded from the final analysis.

Attrition was also experienced in the second phase of the experimental group. Of the 116 participants assigned to the Experimental group, 68 completed the post-survey, with three participants having significant missing data and were removed from the final analysis.

Consequently, for the final analysis, 89 participants were in the control group and 65 participants in the experimental group, with 154 participating in both study phases.

Table 2

Total Participants in the Second Phase: Post-Completed

	Second Phase	Control Post	Experimental Post
Participants	244	115	116
Mortality *		24	48
Missing Data	13	2	3
Total Participants in the group	231	89	65
Total Participants completing both Pre and Post	154		

**Note*. The mortality rate was 21.55% for the control group and 38.26% for the experimental group, with a 59.81% mortality rate for the study's second phase.

Frequency Data

The following tables, Tables 3, 4, and 5, provide general descriptive information about the participants in the study, including gender, education level, experience as leaders, religious belief, and type of higher institution of all the participants in the study, including those with a partially completed survey, pre-survey only, and those participating in both the pre-and post-survey. The participants are divided into the following groups: incomplete data, participants who only completed the pre-survey, and those who finished both the pre-and post-survey.

Table 3

Demographic Characteristics of Participants by Group and by Categories in Phase One

Characteristics	Included Cases for Analysis Total N= 244 n (%)
Comp Pre/Post	
Partially Completed/ Excluded	13 (5)
Completed Pre-Only	77 (31)
Completed Pre/Post	154 (64)
Total	244
Group	
Control	115
Experimental	116
Missing	13
Total	244
Gender	
Male	92 (38)
Female	146 (60)
Missing	6 (2)
Total	244
Education-Highest Degree Earned	
Bachelor's Degree	16 (6)
Master's Degree	63 (26)
Graduate Degree	160 (66)
Missing	5 (2)
Total	244
Leadership Experience in Current Role	
Less than five years	114 (47)
More than five years	126 (52)
Missing	4 (1)
Total	244
Institution of Higher Education (IHE) Setting*	
Public	212 (86)
Private	27 (11)
Missing	5 (2)
Total	244
Religious Belief*	
Yes	111 (46)
No	128 (52)
Missing	5 (2)
Total	244

**Note.* Religious Belief asked participants if they considered themselves religious. The most significant difference in participants is in the category of the IHE setting, with 86% of participants in the public sector.

Table 4

Demographic Characteristics of Participants in the First Phase of The Study: Partially Completed, Pre-Only, and Pre/Post

Characteristics *	Included Cases for Analysis Total N= 244 n (%) Partially Completed n = 13 Completed Pre-Only n = 77 Completed Pre/Post n = 154		
	Partially Completed	Completed Pre-Only	Completed Pre/Post
Gender			
Male	3 (24)	32 (42)	57 (37)
Female	5 (38)	44 (58)	96 (62)
Missing	5 (38)		1 (1)
Total	13	77	154
Education-Highest Degree Earned			
Bachelor's Degree	1 (8)	6 (8)	9 (6)
Master's Degree	5 (38)	21 (28)	37 (24)
Graduate Degree	3 (24)	48 (63)	108 (70)
Missing	4 (30)	1 (1)	
Total	13	77	154
Leadership Experience in Current Role	7 (54)	31 (41)	75 (49)
Less than five years	2 (15)	45 (59)	79 (51)
More than five years	4 (31)		
Missing	13	77	154
Total			
Institution of Higher Education (IHE) Setting			
Public	7 (54)	65(86)	139 (90)
Private	2 (15)	11 (14)	14 (9)
Missing	4 (31)		1 (1)
Total	13	77	154
Religious Belief			
Yes	3 (24)	33 (43)	75 (49)
No	6 (45)	43 (57)	79 (52)
Missing	4 (31)		1 (1)
Total	13	77	154

**Note:* The number of participants in the pre and pre/post groups reflects similar distributions across all characteristics.

Table 5

General Demographic Characteristics of Participants by Category in Phase One of the Study

	Phase One	Gender	Education	Leadership Experience	IHE	Religious Belief
Participants	244	244	244	244	244	244
Missing *	*13*	*6*	*5*	*4*	*5*	*5*
Total	*231*	*238*	*239*	*240*	*239*	*239*

**Note.* Missing data was spread across all categories.

It is worth noting that the general characteristics of those participants who only completed the pre-survey reflect similar characteristics as those who moved forward to conduct pre/post-surveys. Hence, from the demographic statistics, it can be inferred that the study participants represent the general composition of the initial sample gathered for this study.

Pre-Survey: Control and Experimental Group Frequency Data

Table 6 provides descriptive demographic information on the participants who participated in both phases and were randomly assigned to either the control or experimental group. The demographic information is first presented on the 244 pre-survey participants, with 115 in the control group and 116 in the experimental group. 13 participants were excluded from the study due to significant missing data in both the abbreviated 3D-WS measure and open-ended questions.

The demographic characteristics of the control and experimental groups are similar in the number of participants across gender, educational level, leadership experience, IHE, and religious belief. The educational level had the most participants in the graduate degree and the IHE, with the lowest number of participants in the private IHE setting.

Table 6

Demographic Characteristics of Participants in Phase Two: Control and Experimental Group

Characteristics	Included Cases in Phase Two (n=244) (*13 missing Data) n=231 Control 115 Experimental 116 n (%)	
	Control	Experimental
Gender		
Male	46 (40)	41 (35)
Female	69 (60)	71(61)
Missing		4 (3)
Education-Highest Degree Earned		
Bachelor's Degree	7 (6)	8 (7)
Master's Degree	31 (27)	27 (23)
Graduate Degree	77 (67)	78 (67)
Missing		3 (3)
Leadership Experience in Current Role		
Less than five years	48 (42)	60 (52)
More than five years	67 (58)	54 (46)
Missing		2 (2)
Institution of Higher Education (IHE) Setting		
Public	103 (90)	101 (87)
Private	12 (10)	12 (10)
Missing		3 (3)
Religious Belief		
Yes	46 (40)	62 (53)
No	69 (60)	51 (44)
Missing		3 (3)

* *Note.* 13 cases were excluded from phase two of the study due to significant missing data.

Post-Survey: Control and Experimental Group Frequency Data

Table 7 provides descriptive demographic information on the participants who participated in both phases. A total of 154 participants participated in phases one and two, completing both the pre- and post-surveys. There were 89 participants in the control group and 65 in the experimental group.

Table 7

Demographic Characteristics of Participants in the Final Result Phase of the Study

Characteristics	Included Cases for Final Analysis of Study (n=) 154 89 Control 65 Experimental Group n (%)		
	Total Participants	Control	Experimental
Gender *			
Male	57 (37)	35 (39)	22 (34)
Female	98 (63)	54 (61)	43 (56)
Education-Highest Degree Earned			
Bachelor's Degree	9 (6)	4 (4)	5 (8)
Master's Degree	37(24)	24 (27)	13 (20)
Graduate Degree	109 (70)	61 (69)	47 (72)
Leadership Experience in Current Role			
Less than five years	76 (49)	41 (46)	34 (52)
More than five years	79 (51)	48 (54)	31 (48)
Institution of Higher Education (IHE) Setting	140 (90)	80 (90)	60 (92)
Public	14 (10)	9 (10)	5 (8)
Private			
Religious Belief			
Yes	75 (49)	36 (44)	39 (60)
No	79 (51)	53 (56)	26 (40)
Experimental Group Read Material *			
0%			14 (22)
1-25%			11 (17)
26-50%			6 (9)
51-75% *			6 (9)
76-100% *			23 (35)
Missing Data			5 (8)

**Note.* The control group did not participate in reading material—no data to report. Female participants were significantly higher than males. 44% read more than 50% of the material.

Presentation of Findings

Hypothesis 1

H_1- There is a difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not.

H_{01}- There is no difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not.

Hypothesis 1 explored if the attainment of wisdom could be learned systematically by exposing the experimental group to a condensed version of literature on wisdom. An ANOVA between and within-time tests was utilized to address this question. The results of each subdimension of the abbreviated 3D-WS-12 model are presented.

Hypothesis 1 Cognitive Dimension Results.

Tables 8 and 9 present the results of the ANOVA test addressing the results of the Cognitive Dimension of the abbreviated 3D-WS-12 measure.

Table 8

Cognitive Dimensions Mean and SD

	N	Mean	SD
Control Pre	84	4.23	.53
Experimental Pre	64	4.09	.55
Control Post	84	4.11	.55
Experimental Post	64	4.03	.64

Table 9

Cognitive Dimensions ANOVA Results

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Between Groups	.793	1	.79	1.89	.17
Within Groups	.05	1	.05	.248	.62
Error	32.28	147	.22		

Note. P-value: not significant $p > 0.05$ level.

Table 8 presents the mean and standard deviation for the cognitive dimensions in both the pre-and post-groups. Examining the two groups' data reveals that the mean and standard deviation of the control pre- and post- and experimental pre- and post- are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most significant difference noted is between the control pre- with a mean of 4.23 (SD=53), and the control post-group mean of 4.11 (SD=55).

An ANOVA was performed to compare the effect of reading a piece on wisdom on self-reported wisdom. The ANOVA output in Table 9 indicates that for the Cognitive Dimension, the IV does not significantly affect the DV between the control and intervention groups ($F(1, 147) = .248$, $p = .62$). A simple main effect analysis showed that reading wisdom material did not have a statistically significant effect on self-reported wisdom, $p = .62$

Hypothesis 1 Reflective Dimension Results.

Tables 10 and 11 present the results of the ANOVA test addressing the results of the Reflective Dimension of the abbreviated 3D-WS-12 measure.

Table 10

Reflective Dimensions Mean and SD

	N	Mean	SD
Control Pre	84	4.23	.60
Experimental Pre	64	4.01	.63
Control Post	84	4.14	.62
Experimental Post	64	3.91	.65

Table 11

Reflective Dimensions ANOVA Results

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Between Groups	3.45	1	.45	5.61	.02
Within Groups	.00	1	.00	.01	.94
Error	25.44	146	.17		

Note. P-value: not significant $p > 0.05$ level.

Table 10 presents the mean and standard deviation for the Reflective dimensions in both the pre-and post-groups. Examining the two groups' data reveals that the mean and standard deviation of the control pre- and post- and experimental pre- and post- are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most

significant difference noted is between the experimental pre-, with a mean of 4.01 (SD=63), and the experimental post-group mean of 3.91 (SD=65).

A repeated measures ANOVA was performed to compare the effect of reading a piece on wisdom on self-reported wisdom.

The ANOVA output in Table 11 indicates that for the Reflective Dimension, the IV does not significantly affect the DV between the control and intervention groups (F (1, 146) = .01, p = .94). A simple main effect analysis showed that reading wisdom material did not have a statistically significant effect on self-reported wisdom, p =.94

Hypothesis 1 Affective Dimension Results.

Tables 12 and 13 present the results of the ANOVA test addressing the results of the Affective Dimension of the abbreviated 3D-WS-12 measure.

Table 12

Affective Dimensions Mean and SD

	N	Mean	SD
Control Pre	84	3.89	.55
Experimental Pre	64	3.97	.61
Control Post	84	3.95	.48
Experimental Post	64	3.89	.44

Table 13

Affective Dimensions ANOVA Results

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Between Groups	.010	1	.01	.022	.88
Within Groups	.37	1	.37	3.28	.07
Error	16.41	146	.11		

Note. P-value: not significant p > 0.05 level.

Table 12 presents the mean and standard deviation for the affective dimensions in both the pre- and post-groups. Examining the two groups' data reveals that the mean and standard deviation of the control pre- and post- and experimental pre- and post- are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most significant difference noted is between the experimental pre- with a mean of 3.97 (SD=61) and the experimental post-group mean of 3.89 (SD=44).

A repeated measures ANOVA was performed to compare the effect of reading a piece on wisdom on self-reported wisdom.

The ANOVA output in Table 13 indicates that for the Affective Dimension, the IV does not significantly affect the DV between the control and intervention groups ($F(1, 146) = .140$, $p = .07$). A simple main effect analysis showed that reading wisdom material did not have a statistically significant effect on self-reported wisdom, $p = .709$

Hypothesis 1 Summary.

The SPSS data output for the ANOVA for Hypothesis 1, exploring if the attainment of wisdom can be learned systematically, indicates that no significant interaction was found in each dimension of the abbreviated 3D-WS-12 measure.

Given the statistical analysis of the data and tests conducted, the Null hypothesis- there is no difference between self-reported wisdom among higher education leaders exposed to wisdom instruction and those who are accepted.

Hypothesis 2

H_2- The number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower.

H_{02-} The number of leadership year experience does not moderate the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower.

A Factorial ANOVA test was performed to address hypothesis two, evaluating the interactive effects of the number of leadership year experience on self-reported wisdom scores. The results are presented in each subdimension of the abbreviated 3D-WS-12 measure, starting with the Cognitive Dimension, then the Reflective Dimension, and concluding with the Affective Dimension.

Hypothesis 2 Cognitive Dimension Results.

Tables 14 and 15 present the results of the Factorial ANOVA test addressing the results of the Cognitive Dimension of the abbreviated 3D-WS-12 measure.

Table 14

Cognitive Dimension Factorial ANOVA Leadership Years Mean and SD

	Experience	N	Mean	SD
Control	Less than five years	38	4.12	SD
	More than five years	46	4.10	.59
Experimental	Less than five years	34	4.09	.53
	More than five years	31	3.97	.47
Total	Less than five years	72	4.10	.79
	More than five years	77	4.05	.53

Table 15

Cognitive Dimension Factorial ANOVA Leadership Years by Group Experience

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Experience	.16	1	.16	.44	.51
Group * Experience	.09	1	.09	.26	.61
Error	51.20	145	.35		

Note. P-value: not significant $p > 0.05$ level.

Table 14 presents the mean and standard deviation for the cognitive dimensions in both the pre- and post-groups evaluating the effects of the number of leadership year experiences on self-reported wisdom scores. Examining the two groups' data reveals that the mean and standard deviation of the control and experimental groups are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most significant difference is between the experimental group-less than five years, with a mean of 4.09 (SD=.53), and the experimental group-more than five years, with a mean of 3.97 (SD=.47).

A Factorial ANOVA (two-by-two, between-subjects) was conducted to assess the interaction effect of leadership year experience on self-reported wisdom. The output in Table 15 indicates that for the Cognitive Dimension, there was no significant interaction between the number of leadership year experience and self-reported wisdom F (1, 145) = .44, p = .51, partial eta squared = .00

A simple main effect analysis showed that the number of leadership year experience did not have a statistically significant effect on self-reported wisdom, p =.51

Levene's test showed that the variances of the groups were equal F (3, 145) =.421, p = .74, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 2 Reflective Dimension Results.

Tables 16 and 17 present the Factorial ANOVA test results addressing the Reflective Dimension of the abbreviated 3D-WS-12 measure.

Table 16

Reflective Dimension Factorial ANOVA Leadership Years Mean and SD

	Experience	N	Mean	SD
Control	Less than five years	38	4.03	.72
	More than five years	46	4.23	.52
Experimental	Less than five years	33	4.01	.56
	More than five years	31	3.82	.77
Total	Less than five years	71	3.92	.64
	More than five years	77	4.06	.66

Table 17

Reflective Dimension Factorial ANOVA Leadership Years by Group Experience

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Experience	.001	1	.001	.00	.96
Group * Experience	1.39	1	1.39	3.38	.07
Error	59.21	144	.411		

Note. P-value: not significant p > 0.05 level.

Table 16 presents the mean and standard deviation for the reflective dimensions in both the pre- and post-groups evaluating the effects of the number of leadership year experiences on self-reported wisdom scores. Examining the two groups' data reveals that the mean and standard deviation of the control and experimental groups are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most significant difference is between the experimental group-less than five years, with a mean of 4.01 (SD=.56), and the experimental group-more than five years, with a mean of 3.82 (SD=.77).

A Factorial ANOVA (two-by-two, between-subjects) was conducted to assess the interaction effect of leadership year experience on self-reported wisdom. The output indicates that for the Reflective Dimension, there was no significant interaction between the number of leadership year experience and self-reported wisdom F (1, 144) = .00, p = .96, partial eta squared = .00.

A simple main effect analysis showed that the number of leadership year experience did not have a statistically significant effect on self-reported wisdom, p =.96

Levene's test showed that the variances of the groups were equal F (3, 144) =1.74, p = .16, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 2 Affective Dimension Results.

Tables 18 and 19 present the Factorial ANOVA test results addressing the Affective Dimension of the abbreviated 3D-WS-12 measure.

Table 18

Affective Dimension Factorial ANOVA Leadership Years Mean and SD

	Experience	N	Mean	SD
Control	Less than five years	38	4.02	.43
	More than five years	46	3.86	.53
Experimental	Less than five years	33	3.90	.45
	More than five years	31	3.87	.44
Total	Less than five years	71	3.96	.44
	More than five years	77	3.88	.49

Table 19

Affective Dimension Factorial ANOVA Leadership Years by Group Experience

Source of Variation	*SS*				*df*	*MS*	*F*	*P-Value*
Experience	.244	1	.244	1.13	.29			
Group * Experience	.10	1	.10	.44	.51			
Error	31.61	144	.22					

Note. P-value: not significant p > 0.05 level.

Table 18 presents the mean and standard deviation for the affective dimensions in both the pre- and post-groups evaluating the effects of the number of leadership year experiences on self-reported wisdom scores. Examining the two groups' data reveals that the mean and standard deviation of the control and experimental groups are similar, indicating a similar variability between the groups. Regarding differences between the groups, the most significant difference is

between the control group-less than five years, with a mean of 4.02 (SD=.43), and the control group-more than five years, with a mean of 3.86 (SD=.53).

A Factorial ANOVA (two-by-two, between-subjects) was conducted to assess the interaction effect of leadership year experience on self-reported wisdom. The output in Table 19 indicates that for the Affective Dimension, there was no significant interaction between the number of leadership year experience and self-reported wisdom F (1, 144) = 1.13, p = .29.

A simple main effect analysis showed that the number of leadership year experiences did not have a statistically significant effect on self-reported wisdom, p =.29.

Levene's test showed that the variances of the groups were equal F (3, 144) =1.27, p = .29, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 2 Summary.

The SPSS data output for the Factorial ANOVA assessing the interaction effect of leadership year experience on self-reported wisdom indicates that no significant interaction was found between the tested variables. Given the statistical analysis of the data and tests conducted, hypothesis 2-number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower can be rejected.

Hypothesis 3

H_3- Self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

H_{03}- Self-reported wisdom from higher education leaders will not be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

Hypothesis 3 seeks to explore if self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

H_3- One-way ANOVA for each variable

Hypothesis 3 Gender Cognitive Dimension.

Tables 20, 21, and 22 present the One-Way ANOVA test results addressing the cognitive dimension of the abbreviated 3D-WS-12 measure.

Table 20 – Cognitive Dimension One-Way ANOVA Results Mean and SD

	Mean	SD	Count
Male	4.08	.56	52
Female	4.08	.61	96

Table 21 – Cognitive Dimension One-Way ANOVA Results Gender

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Gender	.00	1	.00	.00	.95
Error	51.30	146	.42		

Note. P-value: not significant p > 0.05 level.

Table 22

Cognitive Dimension One-Way ANOVA Results Gender Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.91	1	146	.34

Table 20 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for gender. Examining the two groups' data reveals that the mean and standard deviation of the gender is similar, indicating a similar variability between the groups. Regarding differences between the groups, both means are the same, with a mean of 4.08. However, females have a higher SD=.61.

A One-Way ANOVA was conducted to assess the interaction effect of gender on self-reported wisdom. The output in Table 21 indicates that for the cognitive dimension**,** there was no significant interaction between the number of leadership year experience and self-reported wisdom F (1, 146) = .00, p = .95.

A simple main effect analysis showed that gender did not have a statistically significant effect on self-reported wisdom, p =.95

Table 22 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) =.91, p = .34, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Gender Reflective Dimension.

Tables 23, 24, and 25 present the One-Way ANOVA test results addressing the reflective dimension of the abbreviated 3D-WS-12 measure.

Table 23

Reflective Dimension One-Way ANOVA Results Mean and SD

	Mean	SD	Count
Male	4.18	.54	52
Female	3.96	.70	95

Table 24

Reflective Dimension One-Way ANOVA Results Gender

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Gender	1.61	1	1.61	3.83	.05
Error	60.82	145	.42		

Note. P-value: not significant p > 0.05 level.

Table 25

Reflective Dimension One-Way ANOVA Results Gender Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	3.53	1	145	.06

Table 23 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for gender. Examining the two groups' data reveals that the mean and standard deviation of the gender is similar, indicating a similar variability between the groups. Regarding differences between the groups, the male mean is higher, with a mean of 4.18 (SD=.54).

A One-way ANOVA was conducted to assess the interaction effect of gender on self-reported wisdom. The output in Table 24 indicates that for the reflective dimension**,** there was a significant interaction between the number of leadership year experience and self-reported wisdom F (1, 145) = .3.83, p = .05.

A simple main effect analysis showed that gender did have a statistically significant effect on self-reported wisdom, p =.05

Table 25 presents Levene's test results, showing that the variances of the groups were equal F (1, 145) =3.53, p = .06, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Gender Affective Dimension.

Tables 26, 27, and 28 present the One-Way ANOVA test results addressing the affective dimension of the abbreviated 3D-WS-12 measure.

Table 26

Affective Dimension One-Way ANOVA Results Mean and SD

	Mean	SD	Count
Male	3.97	.45	52
Female	3.90	.48	95

Table 27

Affective Dimension One-Way ANOVA Results Gender

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Gender	.18	1	.18	.84	.36
Error	31.77	145	.22		

Note. P-value: not significant p > 0.05 level.

Table 28

Affective Dimension One-Way ANOVA Results Gender Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.06	1	145	.81

Table 26 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for gender. Examining the two groups' data reveals that the mean and standard deviation of the gender is similar, indicating a similar variability between the groups. Regarding differences between the groups, the mean for males is slightly higher, with a mean of 3.97 (SD=.45).

A One-Way ANOVA was conducted to assess the interaction effect of gender on self-reported wisdom. The output in Table 27 indicates that for the affective dimension**,** there was no

significant interaction between the number of leadership year experience and self-reported wisdom F (1, 145) = .84, p = .36.

A simple main effect analysis showed that gender did not have a statistically significant effect on self-reported wisdom, p =.36

Table 28 presents Levene's test results, showing that the variances of the groups were equal F (1, 145) =.06, p = .81, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Level of Education Cognitive Dimension.

Tables 29, 30, and 31 present the One-Way ANOVA test results addressing the cognitive dimension of the abbreviated 3D-WS-12 measure.

Table 29

Cognitive Dimension One-Way ANOVA Results Level of Education Mean and SD

	Mean	SD	Count
Bachelor's Degree	3.72	.60	8
Master's Degree	4.00	.72	36
Doctorate	4.13	.53	105

Table 30

Cognitive Dimension One-Way ANOVA Results Level of Education

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Level of Education	1.60	1	.80	2.34	.10
Error	50.03	146	.34		

Note. P-value: not significant p > 0.05 level.

Table 31

Cognitive Dimension One-Way ANOVA Results Level of Education Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	1.58	2	146	.21

Table 29 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for level of education. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the groups with the most significant difference are the bachelor's group, with a mean of 3.72(SD=.60), and the doctorate group, with a mean of 4.13 (SD=.53).

A One-way ANOVA was conducted to assess the interaction effect of the level of education. The output in Table 30 indicates that for the Cognitive Dimension**,** there was no significant interaction between the level of education and self-reported wisdom F (1, 146) = 2.34, p = .10.

A simple main effect analysis showed that the level of education did not have a statistically significant effect on self-reported wisdom, p =.10

Table 31 presents Levene's test results, showing that the variances of the groups were equal F (2, 146) = 1.58, p = .21, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Level of Education Reflective Dimension.

Tables 32, 33, and 34 present the One-Way ANOVA test results addressing the Reflective Dimension of the abbreviated 3D-WS-12 measure.

Table 32

Reflective Dimension One-Way ANOVA Results Level of Education Mean and SD

	Mean	SD	Count
Bachelor's Degree	3.63	.72	8
Master's Degree	4.02	.84	36
Doctorate	4.08	.56	104

Table 33

Reflective Dimension One-Way ANOVA Results Level of Education

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Level of Education	1.58	2	.78	1.88	.17
Error	60.84	145	.42		

Note. P-value: not significant p > 0.05 level.

Table 34

Reflective Dimension One-Way ANOVA Results Level of Education Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	4.17	2	145	.02

Table 32 presents the mean and standard deviation for the reflective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for level of education. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the groups with the most significant difference are the bachelor's group, with a mean of 3.63 (SD=.72), and the doctorate group, with a mean of 4.08 (SD=.56).

A One-way ANOVA was conducted to assess the interaction effect level of education. The output in Table 33 indicates that for the Reflective Dimension**,** there was no significant interaction between the level of education and self-reported wisdom F (2, 145) = 1.88, p = .17.

A simple main effect analysis showed that the level of education did not have a statistically significant effect on self-reported wisdom, p =.17

Table 34 presents Levene's test results, showing that the variances of the groups were equal F (2, 145) =4.17, p = .02, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Level of Education Affective Dimension.

Tables 35, 36, and 37 present the One-Way ANOVA test results addressing the affective dimension of the abbreviated 3D-WS-12 measure.

Table 35

Affective Dimension One-Way ANOVA Results Level of Education Mean and SD

	Mean	SD	Count
Bachelor's Degree	3.69	.46	8
Master's Degree	3.98	.43	36
Doctorate	3.92	.48	104

Table 36

Affective Dimension One-Way ANOVA Results Level of Education

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Level of Education	.56	2	.78	1.28	.28
Error	31.57	145	.22		

Note. P-value: not significant p > 0.05 level.

Table 37

Affective Dimension One-Way ANOVA Results Level of Education Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.25	2	145	.78

Table 35 presents the mean and standard deviation for the affective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for level of education. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences

between groups, the groups with the most significant difference are the bachelor's group, with a mean of 3.69 (SD=.46), and the doctorate group, with a mean of 3.92 (SD=.48).

A One-Way ANOVA was conducted to assess the interaction effect of the level of education. The output in Table 36 indicates that for the affective dimension, there was no significant interaction between the level of education and self-reported wisdom F (2, 145) = 1.28, p = .28.

A simple main effect analysis showed that the level of education did not have a statistically significant effect on self-reported wisdom, p =.28

Table 37 presents Levene's test results, showing that the variances of the groups were equal F (2, 145) =.25, p = .78, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Leadership Years' Experience Cognitive Dimension.

Tables 38, 39, and 40 present the One-Way ANOVA test results addressing the cognitive dimension of the abbreviated 3D-WS-12 measure.

Table 38

Cognitive Dimension Factorial ANOVA Leadership Years' Experience Mean and SD

	Mean	SD	Count
Less than five years	4.10	.53	72
More than five years	4.05	.64	77

Table 39

Cognitive Dimension One-Way ANOVA Results Leadership Years' Experience

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Leadership Years	.11	1	.11	.30	.58
Error	51.53	147	.35		

Note. P-value: not significant p > 0.05 level.

Table 40

Cognitive Dimension One-Way ANOVA Results Leadership Years' Experience Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.33	1	147	.56

Table 38 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for leadership years' experience. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is the less than five years group, with a mean of 4.10 (SD=.53).

A One-Way ANOVA was conducted to assess the interaction effect of leadership years' experience on self-reported wisdom. The output in Table 39 indicates that for the cognitive dimension, there was no significant interaction between the number of leadership years' experience and self-reported wisdom F (1, 147) = .30, p = .58.

A simple main effect analysis showed that leadership years' experience did not have a statistically significant effect on self-reported wisdom, p = .58.

Table 40 presents Levene's test results, showing that the variances of the groups were equal F (1, 144) = .33, p = .56, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Leadership Years' Experience Reflective Dimension.

Tables 41, 42, and 43 present the One-Way ANOVA test results addressing the reflective dimension of the abbreviated 3D-WS-12 measure.

Table 41

Reflective Dimension One-Way ANOVA Results Leadership Years' Experience Mean and SD

	Mean	SD	Count
Less than five years	4.02	.64	71
More than five years	4.06	.66	77

Table 42

Reflective Dimension One-Way ANOVA Results Leadership Years' Experience

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Leadership Years' Experience	.08	1	.08	.18	.68
Error	62.35	146	.43		

Note. P-value: not significant p > 0.05 level.

Table 43

Reflective Dimension One-Way ANOVA Results Leadership Years' Experience Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.05	1	146	.82

Table 41 presents the mean and standard deviation for the reflective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for leadership years' experience. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is the more than five years group, with a mean of 4.06 (SD=.66).

A One-Way ANOVA was conducted to assess the interaction effect of leadership years' experience on self-reported wisdom. The output in Table 42 indicates that for the reflective

dimension, there was no significant interaction between the number of leadership years' experience and self-reported wisdom F (1, 146) = .18, p = .68.

A simple main effect analysis showed that leadership years' experience did not have a statistically significant effect on self-reported wisdom, p = .68.

Table 43 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) =.05, p = .82, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Leadership Years' Experience Affective Dimension.

Tables 44, 45, and 46 present the One-Way ANOVA test results addressing the affective dimension of the abbreviated 3D-WS-12 measure.

Table 44

Affective Dimension One-Way ANOVA Results leadership years' experience Mean and SD

	Mean	SD	Count
Less than five years	3.96	.44	71
More than five years	3.88	.49	77

Table 45

Affective Dimension One-Way ANOVA Results leadership years' experience

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Leadership Years' Experience	.27	1	.27	.27	.01
Error	31.86	146	.22		

Note. P-value: not significant p > 0.05 level.

Table 46

Affective Dimension One-Way ANOVA Results leadership years' experience Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	1.32	1	146	.25

Table 44 presents the mean and standard deviation for the affective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for leadership years' experience. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is the less than five years group, with a mean of 3.96 (SD=.44).

A One-way ANOVA was conducted to assess the interaction effect of leadership years' experience. The output in table 45 indicates that for the affective dimension, there was a significant interaction between the number of leadership years' experience and self-reported wisdom F (1, 146) = .27, p = .01.

A simple main effect analysis showed that leadership years' experience did have a statistically significant effect on self-reported wisdom, p = .01.

However, Table 46 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) = 1.32, p = .25, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Employment Setting Cognitive Dimension.

Tables 47, 48, and 49 present the One-Way ANOVA test results addressing the cognitive dimension of the abbreviated 3D-WS-12 measure.

Table 47

Cognitive Dimension One-Way ANOVA Results Employment Setting Mean and SD

	Mean	SD	Count
Public	4.10	.56	134
Private	3.86	.81	14

Table 48

Cognitive Dimension One-Way ANOVA Results Employment Setting

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Employment Setting	.75	1	.75	2.15	.15
Error	50.88	146	.35		

Note. P-value: not significant p > 0.05 level.

Table 49

Cognitive Dimension One-Way ANOVA Results Employment Setting Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.33	1	146	.57

Table 47 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for employment settings. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is public, with a mean of 4.10 (SD=.56).

A One-Way ANOVA was conducted to assess the interaction effect of employment setting on self-reported wisdom. The output in Table 48 indicates that for the cognitive dimension, there was no significant interaction between the number of employment settings and self-reported wisdom F (1, 146) = 2.15, p = .15.

A simple main effect analysis showed that employment setting did not have a statistically significant effect on self-reported wisdom, p = .15.

Table 49 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) = .33, p = .57, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Employment Setting Reflective Dimension.

Tables 50, 51, and 52 present the One-Way ANOVA test results addressing the reflective dimension of the abbreviated 3D-WS-12 measure.

Table 50

Reflective Dimension One-Way ANOVA Results Employment Setting Mean and SD

	Mean	SD	Count
Public	4.06	.61	133
Private	3.95	.98	14

Table 51

Reflective Dimension One-Way ANOVA Results Employment Setting

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Employment Setting	.16	1	.16	.36	.55
Error	60.64	145	.43		

P-value: not significant $p > 0.05$ level.

Table 52

Reflective Dimension One-Way ANOVA Results Employment Setting Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	1.45	1	145	.23

Table 50 presents the mean and standard deviation for the reflective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for employment settings. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is public, with a mean of 4.06 (SD=.61).

A One-Way ANOVA was conducted to assess the interaction effect of employment setting. The output in Table 51 indicates that for the reflective dimension, there was no significant interaction between employment setting and self-reported wisdom F (1, 145) = .36, p = .55.

A simple main effect analysis showed that employment setting did not have a statistically significant effect on self-reported wisdom, p = .55.

Table 52 presents Levene's test results, showing that the variances of the groups were equal F (1, 145) = 1.45, p = .23, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Employment Setting Affective Dimension.

Tables 53, 54, and 55 present the One-Way ANOVA test results addressing the affective dimension of the abbreviated 3D-WS-12 measure.

Table 53

Affective Dimension One-Way ANOVA Results Employment Setting Mean and SD

	Mean	SD	Count
Public	3.93	.46	133
Private	3.79	.54	14

Table 54

Affective Dimension One-Way ANOVA Results Employment Setting

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Employment Setting	.28	1	.28	1.27	.26
Error	31.84	145	.22		

Note. P-value: not significant p > 0.05 level.

Table 55

Affective Dimension One-Way ANOVA Results Employment Setting Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	1.05	1	145	.31

Table 53 presents the mean and standard deviation for the affective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for employment setting. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, the group with the highest mean is public, with a mean of 3.93 (SD=.46).

A One-way ANOVA was conducted to assess the interaction effect of employment setting on self-reported wisdom. The output in Table 54 indicates that for the affective dimension, there was no significant interaction between employment setting and self-reported wisdom F (1, 145) = 1.27, p = .26.

A simple main effect analysis showed that employment setting did not have a statistically significant effect on self-reported wisdom, p = .26.

Table 55 presents Levene's test results, showing that the variances of the groups were equal F (1, 145) = 1.05, p = .31, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Religious Belief Cognitive Dimension.

Tables 56, 57, and 58 present the One-Way ANOVA test results addressing the cognitive dimension of the abbreviated 3D-WS-12 measure.

Table 56

Cognitive Dimension One-Way ANOVA Religious Belief Mean and SD

	Mean	SD	Count
Yes	4.08	.65	72
No	4.08	.54	76

Table 57

Cognitive Dimension One-Way ANOVA Results Religious Belief

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Religious Belief	.00	1	.00	.00	.97
Error	51.30	146	.35		

Note. P-value: not significant p > 0.05 level.

Table 58

Cognitive Dimension One-Way ANOVA Results Religious Belief Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.57	1	146	.45

Table 56 presents the mean and standard deviation for the cognitive dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for religious belief. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, both groups had the same mean of 4.08; however, the yes group had the highest (SD=.65).

A One-Way ANOVA was conducted to assess the interaction effect of religious belief. The output in Table 57 indicates that for the cognitive dimension, there was no significant interaction between religious belief and self-reported wisdom F (1, 146) = .00, p = .97.

A simple main effect analysis showed that religious belief did not have a statistically significant effect on self-reported wisdom, p = .97.

Table 58 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) = .57, p = .45, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Religious Belief Reflective Dimension.

Tables 59, 60, and 61 present the One-Way ANOVA test results addressing the Reflective Dimension of the abbreviated 3D-WS-12 measure.

Table 59

Reflective Dimension One-Way ANOVA Religious Belief Mean and SD

	Mean	SD	Count
Yes	4.04	.71	71
No	4.04	.60	76

Table 60

Reflective Dimension One-Way ANOVA Results Religious Belief

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Religious Belief	.00	1	.00	.00	.99
Error	62.42	145	.43		

Note. P-value: not significant p > 0.05 level.

Table 61

Reflective Dimension One-Way ANOVA Results Religious Belief Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.39	1	146	.54

Table 59 presents the mean and standard deviation for the reflective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for religious belief. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, both groups had the same mean of 4.04; however, the yes group had the highest (SD=.71).

A One-Way ANOVA was conducted to assess the interaction effect of religious belief on self-reported wisdom. The output in Table 60 indicates that for the reflective dimension, there was no significant interaction between religious belief and self-reported wisdom F (1, 145) = .00, p = .99.

A simple main effect analysis showed that religious belief did not significantly affect self-reported wisdom, p = .99

Table 61 presents Levene's test results, showing that the variances of the groups were equal F (1, 146) = .39, p = .54, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Religious Belief Affective Dimension.

Tables 62, 63, and 64 present the One-Way ANOVA test results addressing the affective dimension of the abbreviated 3D-WS-12 measure.

Table 62

Affective Dimension One-Way ANOVA Religious Belief Mean and SD

	Mean	SD	Count
Yes	3.93	.48	71
No	3.92	.46	76

Table 63

Affective Dimension One-Way ANOVA Results Religious Belief

Source of Variation	*SS*	*df*	*MS*	*F*	*P-Value*
Religious Belief	.00	1	.00	.00	.95
Error	31.95	145	.22		

Note. P-value: not significant p > 0.05 level.

Table 64

Affective Dimension One-Way ANOVA Results Religious Belief Levene's Test of Equality of Error Variance

	Levene's Statistic	*df1*	*df2*	*Sig.*
Based on Mean	.22	1	145	.64

Table 62 presents the mean and standard deviation for the affective dimensions exploring if self-reported wisdom from higher education leaders will be significant when controlling for religious belief. Examining the three groups' data reveals that the mean and standard deviation is similar, indicating a similar variability between the groups. Regarding differences between groups, both groups had very close means and SD, with the yes group having a mean of 3.93 (SD=.48) and the no with a mean of 3.92 (SD=.46).

A One-way ANOVA was conducted to assess the interaction effect of religious belief on self-reported wisdom. The output in Table 63 indicates that for the affective dimension, there was no significant interaction between religious belief and self-reported wisdom F (1, 145) = .00, p = .95.

A simple main effect analysis showed that religious belief did not have a statistically significant effect on self-reported wisdom, p = .95.

Table 64 presents Levene's test results, showing that the variances of the groups were equal F (1, 145) = .22, p = .64, thus concluding that the assumption of homogeneity of variance was fulfilled.

Hypothesis 3 Summary.

The SPSS data output for the One-Way ANOVA controlling for self-reported wisdom from higher education leaders when controlling for gender, level of education, leadership experience, employment setting, and religious belief indicates no significant interaction between the tested variables.

Given the statistical analysis of the data and test conducted, hypothesis 3, exploring if self-reported wisdom from higher education leaders is significant when controlling for gender, level of education, employment setting, and religious belief, can be rejected.

Open-Ended Questions

The following section presents the data obtained from the open-ended questions. First, the data collected from the control will be discussed, followed by the data collected from the experimental group.

Control Group Results.

Question 1: Please list what books you have read since the first survey.

Table 65 presents the data collected for question one. Of the 89 participants in the control group, 44 left the question blank or unanswered, providing no specific answer. Of the remaining 45 participants, no book stood out as the most read. The following table provides detailed information regarding the participants' demographics regarding their responses.

Table 65

Control Group Question: Please list what books you have read since the first survey.

Control Group N=89	Blank /Missing Response n=44	General Response n=45
Gender		
Male	16 (34)	19 (42)
Female	28 (64)	26 (58)
Missing	0	0
Level of Education		
Bachelor's	2 (5)	2 (4)
Master's	6 (14)	18 (40)
Doctorate	36 (81)	25 (56)
Leadership Experience		
Less than five years	16 (36)	25 (56)
More than five years	28 (54)	20 (44)
IHE		
Public	40 (91)	40 (89)
Private	4 (9)	5 (11)
Missing		
Religious Belief		
Yes	21 (48)	15 (35)
No	23 (52)	29 (64)
Missing		
Bible		1 (1)

Question 2: What is your go-to book for practicing wise leadership?

Table 66 presents the data collected for question two and corresponding demographic information. Of the 89 participants in the control group, 49 left the question blank or unanswered with no specific answer provided. It is worth noting that the Bible was listed three times as the go-to book for leadership.

Table 66

Control Group Question: What is your go-to book for leadership?

Control Group N=89	Blank / Missing Response n=49	General Response n=40
Gender		
Male	20 (49)	15 (38)
Female	29 (51)	25 (62)
Missing		
Level of Education		
Bachelor's	2 (4)	2 (5)
Master's	6 (12)	18 (45)
Doctorate	41 (84)	20 (53)
Leadership Experience		
Less than five years	18 (37)	23 (58)
More than five years	31 (63)	17 (42)
IHE		
Public	46 (94)	34 (85)
Private	3 (6)	6 (15)
Missing		
Religious Belief		
Yes	21 (43)	16 (40)
No	28 (57)	24 (60)
Missing		

Experimental Group Results.

Question 1: Please list what books you have read since the first survey.

Table 67 presents the data collected for question one of the experimental group and corresponding demographic information. Of the 65 participants in the experimental group, 37 participants left the question blank or unanswered, providing no specific answer. The 28 remaining participants provided many books, with not one book standing out.

Table 67

Experimental Group Question: Please list what books you have read since the first survey.

Experimental Group N=65	Blank /Missing Response n=37	General Response n=28
Gender		
Male	12 (32)	8 (29)
Female	25 (68)	20 (71)
Missing		
Level of Education		
Bachelor's	1 (2)	2 (7)
Master's	7 (19)	15 (54)
Doctorate	29 (79)	11 (39)
Leadership Experience		
Less than five years	17 (46)	12 (43)
More than five years	20 (54)	16 (57)
Missing		
IHE		
Public	35 (95)	27 (96)
Private	2 (5)	1 (4)
Missing		
Religious Belief		
Yes	24 (65)	16 (57)
No	13 (35)	12 (43)
Missing		

Question 2: What is your go-to book for practicing wise leadership?

Table 68 presents the data collected for the experimental group question two and the corresponding demographic information. Of the 65 participants in the experimental group, 33 participants left the question blank or unanswered with no specific answer provided.

Table 68

Experimental Group Question: What is your go-to book for leadership?

Experimental Group N = 65	Blank / Missing Response n=33	General Response n=26	Bible n=6
Gender			
Male	11 (33)	7 (27)	3 (50)
Female	21 (64)	19 (73)	3 (50)
Missing	1 (3)		
Level of Education			
Bachelor's	4 (12)	1 (4)	0
Master's	6 (18)	4 (15)	2 (23)
Doctorate	23 (70)	21 (81)	4 (67)
Leadership Experience			
Less than five years	15 (46)	15 (58)	3 (50)
More than five years	18 (54)	11 (42)	3 (50)
IHE			
Public	32 (97)	22 (85)	5 (83)
Private	1 (3)	4 (15)	
Missing			1 (17)
Religious Belief			
Yes	13 (39)	17 (65)	6 (100)
No	19 (58)	9 (35)	0
Missing	1 (3)		

Note. The distributions for Leadership Experience and Religious are distributed opposite for those that provided an answer or left the answer blank.

Question 3: How did or did it not (reading the condensed version of wisdom literature) assist you in reading the condensed version of wisdom?

Table 69 presents the data collected for the experimental group question three and the corresponding demographic information. Of the 65 participants in the experimental group, 18 participants left the question blank or unanswered with no specific answer provided. The remaining 47 participants responded with "more the ability to see wisdom in others than in myself" or "I develop multiple ways for understanding appropriate responses to difficult situations." From the participants' responses, it appears the material assisted the participant

positively by elevating their understanding of wisdom and how to apply it to their current leadership role.

Table 69

Experimental Group Question: How did or did it not assist you in reading the condensed version of wisdom?

Experimental Group N = 68	Blank / Missing Response n=18	General Response n=47
Gender		
Male	7 (39)	13 (28)
Female	9 (50)	30 (64)
Missing	2 (11)	4 (8)
Level of Education		
Bachelor's	1 (6)	4 (8)
Master's	4 (22)	7 (15)
Doctorate	13 (72)	36 (77)
Leadership Experience		
Less than five years	11 (61)	21 (45)
More than five years	7 (39)	26 (55)
IHE		
Public	16 (88)	43 (91)
Private	1 (6)	3 (6)
Missing	1(6)	1 (3)
Religious Belief		
Yes	9 (50)	31 (67)
No	7 (39)	16 (33)
Missing	2 (11)	
Experimental Group Read Material *		
0%	10 (56)	4 (8)
1-25%	3 (17)	8 (17)
26-50%	1 (6)	5 (11)
51-75%	0	6 (13)
76-100%	0	23 (49)
Missing Data	4 (21)	1 (2)

** Note. More than 60% of the participants read 52% or more of the condensed literature on wisdom.*

Reliability

Although past studies have demonstrated the reliability of the instrument utilized for this study, the abbreviated 3D-WS-12 measure, this study also conducted a reliability test to confirm reliability in the following sub-dimensions: cognitive, reflective, and affective.

Cronbach's Alphas

The following is the SPSS data output addressing Cronbach's Alpha of the abbreviated 3D-WS-12 measure. The abbreviated 3D-WS-12 measure consists of 12 items with three subdimensions: cognitive, reflective, and affective.

The findings are as follows: An initial Cronbach's Alpha of .42 pre- and .41 post- with no significant correlation between the four components of the cognitive dimension. An initial Cronbach's Alpha of .58 pre- and .67 post- with no significant correlation between the four components of the reflective dimension. An initial Cronbach's Alpha of .52 pre- and .31 post- with no significant correlation between the four components of the affective dimension. Thus, the current study demonstrates that the abbreviated 3D-WS-12 measure does not demonstrate reliability in the three components.

Table 70

Cronbach's Alphas for Abbreviated 3D-WS

Subdimension	N	Items	Cronbach's a Pre	Cronbach's a Post
Cognitive Dimension	154	4	0.42	0.41
Reflective Dimension	154	4	0.58	0.67
Affective Dimension	154	4	0.52	0.31

Table 71

Cronbach's Alphas for Abbreviated 3D-WS Subdimensions Cognitive

Cognitive Dimension	Mean	SD
RD5	3.62	0.97
RD6	4.39	0.80
RD7	4.27	0.92
RD8	4.07	1.01

Table 72

Cronbach's Alphas for Abbreviated 3D-WS Subdimensions Reflective

Reflective Dimension	Mean	SD
RD5	4.31	0.83
RD6	3.78	0.98
RD7	4.17	0.95
RD8	3.90	0.93

Table 73

Cronbach's Alphas for Abbreviated 3D-WS Subdimensions Affective

Affective Dimension	Mean	SD
AD9	4.24	0.73
AD10	4.07	0.89
AD11	3.88	0.81
AD12	3.50	0.85

Interpretation of Findings

This chapter presented the findings for the three hypotheses tested in this study: H_1- There is a difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not. H_{01}- There is no difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who do not. H_2- The number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is

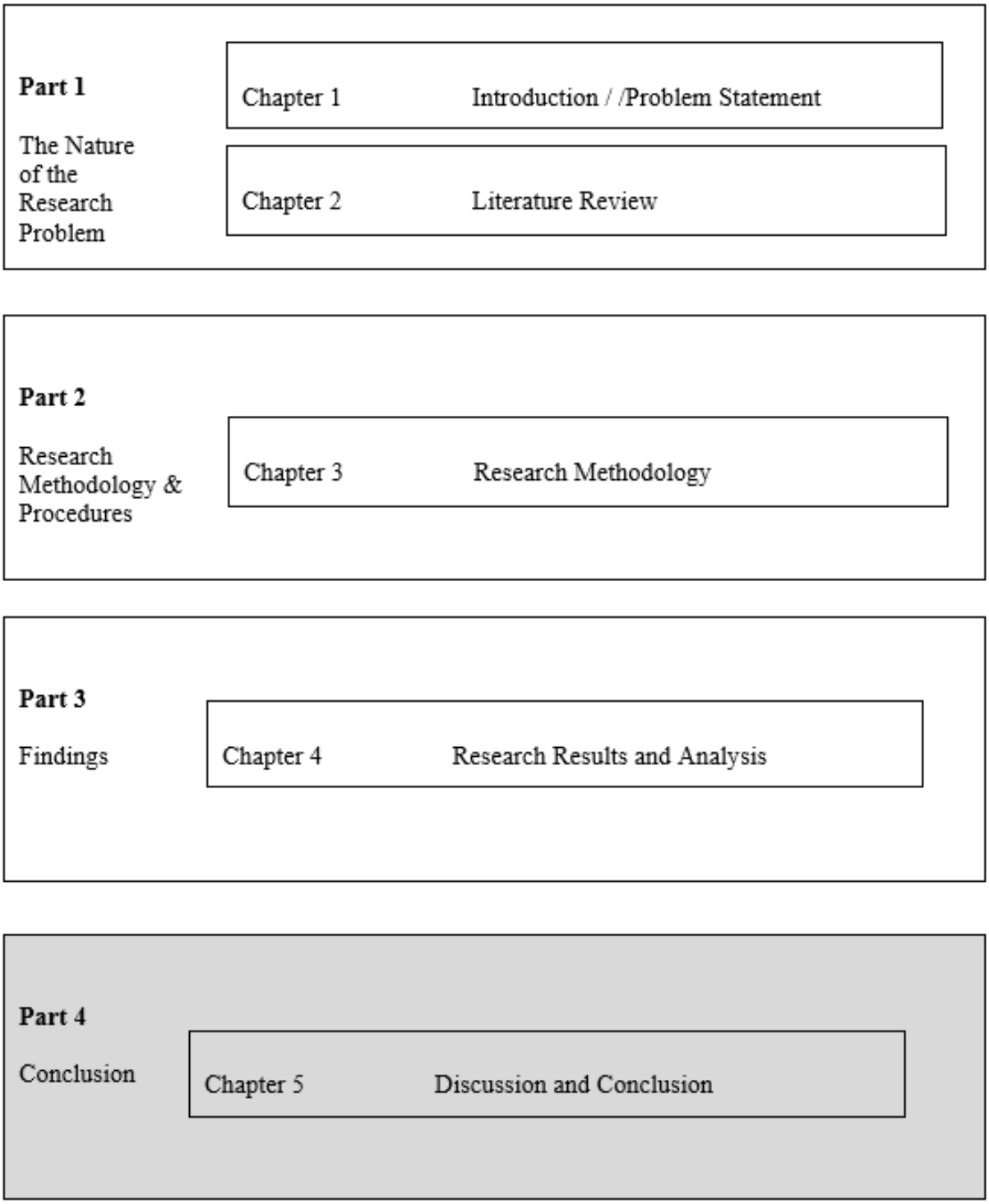
higher rather than lower. H_{02}- The number of leadership year experience does not moderate the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower. H_3- Self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief. H_{03}- Self-reported wisdom from higher education leaders will not be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief.

The SPSS data output for all three hypotheses indicates no significant findings for each hypothesis. Except for the following hypothesis subdimensions: the One-way ANOVA for gender for the reflective dimension F (1, 145) = .3.83, p = .05. and the One-way ANOVA for leadership years' experience for the affective dimension F (1, 146) = .27, p = .01. However, although the p-value appears to be significant it has to be cautiously considered given the low Cronbach's alpha of the instrument utilized and other limitations of this study.

Given the statistical analysis of the data and tests conducted, the following has been determined: hypothesis 1-there is a difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not can be rejected. Hypothesis 2-number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower can be rejected. Last, hypothesis 3-exploring if self-reported wisdom from higher education leaders is significant when controlling for gender, level of education, employment setting, and religious belief, can be rejected.

Therefore, all three null hypotheses: H_{01}- There is no difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who do not. H_{02}- The number of leadership year experience does not moderate the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower. H_{03}- Self-reported wisdom from higher education leaders will not be significant when controlling for gender, level of education, years of experience, employment setting, and religious belief—are accepted.

The data collected from the open-ended questions indicates that participants in this study are not reading despite the advantages of reading and leadership skill development. The control and experimental groups had more than 50% of participants leaving the question *"Please list what books you have read since the first survey"* blank or providing no specifics as to what books had been read since the start of the study. The same results were noted in both groups when asked to list "W*hat is your go-to book for practicing wise leadership?* 50% of the participants left the question blank in both groups. Despite these findings, there was a positive response from participants in the experimental group who responded to the question, *"How did or did it not (reading the condensed version of wisdom literature) assist you in reading the condensed version of wisdom?* More than 60% of the participants read 52% or more of the condensed literature on wisdom, responding favorably to the material read. Responses include "more the ability to see wisdom in others than in myself" or "I develop multiple ways for understanding appropriate responses to difficult situations." From the participants' responses, it seems the material assisted the participant positively by expanding their understanding of wisdom and providing a language to convey wisdom connected to their leadership role.


Part 1
The Nature of the Research Problem
Chapter 1 Introduction / /Problem Statement
Chapter 2 Literature Review
Part 2
Research Methodology & Procedures
Chapter 3 Research Methodology
Part 3
Findings
Chapter 4 Research Results and Analysis
Part 4
Conclusion
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Discussion and Conclusions

Chapter Overview

This study primarily examined the relationship between exposure to a condensed reading on wisdom and self-reported wisdom scores by leaders in higher education institutions. The study failed to find statistical significance among the variables in the study. However, this study discovered several secondary findings regarding wisdom and leadership worthy of discussion. First, the study's number of higher education leader participants suggests today's leaders value wisdom. Second, the low number of higher education leaders reporting reading as a habit begs the question of why leaders are not reading? Third, positive responses of the participants who did complete the wisdom reading affirm the previously discussed relationship between reading and the ability to acquire a language and knowledge for a concept such as wisdom. However, these findings are secondary in this study and require additional exploration and research. This chapter discusses the results previously mentioned, addresses the study's limitations, and expounds on the conclusions related to chapters one and two. In addition, it considers the contributions made to the literature while presenting suggestions for future studies. It concludes with the implications for leadership and wisdom research and practices.

Synthesis of Findings

This research investigated wisdom and leadership and how one can grow in wisdom with intentionality. The participants included: vice presidents, deans, chairs, or administrative positions within the higher education system, with staff reporting to them and for whom they are responsible for leading in a four-year university across the U.S. There is consensus that wisdom benefits society and can be learned. Being wise and accomplishing goodness in life is a goal reachable by all. Galli (2016) affirms, "in a world in desperate need of truth, goodness, and

beauty, we have the privilege of communicating the breadth of the true, good, and beautiful Gospel in our words, in our actions, and our lives" (p. 8) and the choice to grow in wisdom. This study proposed three questions to support the urgent need for wise leaders and more research on wisdom and leadership: Can the attainment of wisdom be accelerated in an abbreviated curriculum on wisdom? Does an abbreviated model of wisdom help leaders better practice wisdom? And would higher education leaders who participate in a learned-wisdom educational intervention increase their self-reported wisdom? The study findings do not yield supporting evidence for the three questions.

Three hypotheses were tested to answer the research questions: H_1- There is a difference between self-reported wisdom among higher education leaders exposed to a condensed version of wisdom literature and those who have not. H_2- The number of leadership year experience moderates the interactive effects of wisdom instruction such that additive effects on the leaders' self-reported wisdom scores are stronger when the number of leadership year experience is higher rather than lower, and H_3- Self-reported wisdom from higher education leaders will be significant when controlling for gender, level of education, years of experience, employment setting, and faith. Results from SPSS data analysis did not support the hypothesis, thus rejecting and accepting the null hypothesis for all three hypotheses.

Contrary to the expectations of this study, based on previous studies such as Ardelt (2020), the findings did not support the stated hypotheses. Research in the field of wisdom focusing on how to nurture wisdom is recent. Although there is consensus that wisdom can be fostered and cultivated, future studies are needed (Sharma et al., 2017). Ardelt (2020) indicates that although outcomes suggest that wisdom and psychosocial growth were shown in her findings, "the mechanisms for increases in wisdom and psychosocial growth are not clear from

this study and will need to be examined in future qualitative studies" (p. 42). The ability to write a reflection journal was elevated as a crucial intervention combining academic and experiential learning (Arldet, 2020). Perhaps this study lacked sufficient time for the participants to read the intervention and allow for self-reflection. Future studies may consider combining the intervention with journaling to explore nurturing wisdom.

Likewise, other factors that may have impacted this study are the instrument utilized or the intervention selected. Possibly the abbreviated 3D-WS was not the best-fit measure to use with the population of this study. According to Brienza et al. (2018), there are "studies that indicate the possibility that major instruments developed to test wisdom appear biased, and it is unclear whether they capture balance-related tendencies" (p. 1093). Furthermore, the intervention utilized perhaps did not cause an effect eliciting sufficient use of the participant's cognitive or reflective abilities to result in wisdom growth. Given the current research on cultivating wisdom, a consideration for future studies is to utilize a different intervention, such as one that fosters self-reflection, insight, and understanding of oneself, journaling, or other activity to engage the cognitive, reflective, and affective qualities.

Moreover, the context in which the study was conducted is another factor to consider. Grossman (2017) contends that "experiential, situational, and cultural factors are even more powerful in shaping wisdom than previously imagined" (p. 233). Affirming how attention to these factors can shed "new light on the processes underlying wise thought and its development helps to integrate different approaches to studying wisdom, and has implications for measurement and development of wisdom-enhancing interventions" (Grossmann, 2017, p. 233). Future studies can be conducted in a different context paying attention to these implications.

Furthermore, this study examined the effects of gender, years of experience, level of education, employment setting, and faith on self-reported wisdom, resulting in no significant findings. These findings align with research studies that suggest wisdom and leadership are not constrained by a specific factor or setting. Conversely, "wisdom may be enhanced on the levels of individuals, groups, and even societies" (Stange & Kunzmann, 2008, p. 24). Social science studies point to the ability to cultivate wisdom over time, with the need for self-reflection, examining life experiences, and being in the company of others, but most importantly, to choose to grow in wisdom. This study has argued that leadership and wisdom should go hand in hand. Leadership theory is a vibrant young field of study, robust and still growing, evolving, and progressing (Goethals & Sorenson, 2006). A leader must be committed to ongoing self-growth and self-reflection, applying the knowledge gained to their leadership practice (Northouse, 2018)—wisdom is required. Future studies are necessary to examine how to cultivate wisdom in our leaders and continue the endeavor of bridging wisdom and leadership.

Likewise, the open-ended questions ascertaining the participants' reading habits revealed several compelling findings. First, the low number of participants in both the control and experimental group, indicating that no books had been read since the start of the study, implies that leaders are not reading. More than 50% of participants in both groups left a blank response or no answer to the first question: Please list what books you have read since the first survey. Moreover, over 50% of the control and experimental group left a blank or unanswered response to the question: what is your go-to book for practicing wise leadership.? If leaders are not reading, how are leaders acquiring knowledge, understanding, and wisdom? What is occupying leaders' time? What values are leaders relying on to allocate their time, and to what demands of leadership? Perhaps, today's leaders, as the captain of their ships, are guided by a compass

pointing toward mass production, quick reads, and an ever-demanding logistical, technological world where self-reflection and reading are a faint image on the horizon.

Furthermore, given that “leaders should cultivate proper insights, use of language and passions by reading judiciously and frequently” *(*Shoup & Hinrichs, 2021, p. 49), this study’s finding of low engagement by higher education leaders in reading begs the question of why? As previously examined, reading provides the platform to cultivate insights into life’s peculiarities and general schemes. Given the benefits of reading and the previous discussion on leaders' reading habits, an interesting question to ask in future studies is, what is causing higher education leaders to not read? Is it only higher education leaders or leaders in other settings who are losing the practice of reading? Future studies could explore these questions contributing to understanding leaders' low engagement in reading and possible factors to support fostering reading as a leader's habit. As previously reasoned, we become what we read.

However, this study also observed a positive secondary outcome. The findings obtained from the answer to question three of the experimental group: please indicate if and how the reading material helped you better understand and practice wisdom, revealed that those participants who read the condensed literature on wisdom responded favorably. The responses of the participants who completed the reading suggested increased understanding and acquisition of language for wisdom. Participants responded, such as “I develop multiple ways for understanding appropriate responses to difficult situations” and “Yes, I recognize that true wisdom is critical in the decision-making process,” indicating that perhaps the material positively impacted the participants' understanding of wisdom. Future studies could explore if reading encourages participants to engage in self-reflection and thoughtful consideration of the material read to develop and cultivate wisdom. Based on the results, this study suggests that

leaders may not be taking the time to reflect and expand their cognitive abilities. As previously mentioned, leaders should be readers. The responses from question three support the argument that reading is beneficial to acquiring knowledge and a vocabulary to expand understanding and grow in wisdom. Future studies may want to probe this study's outcome to explore the preliminary findings further and address the complexity of measuring the amount of reading content internalized and applied in daily leadership tasks.

Limitations of the Study

Delimitations / Assumptions / Limitations

As discussed in chapter one, the present study had several delimitations, assumptions, and limitations. The delimitations were several—first, the researcher's interest in studying participants with leadership roles in higher education institutions. Second, a convenience sample was utilized for the recruitment of the participants. Finally, the instrument used the abbreviated 3D-WS scale to answer the research questions was used for the first time for this study's design. While the present study utilized a similar design employed by researchers using self-assessment tools to measure wisdom (Ardelt, 2000, 2003; Webster, 2003a, 2007), the instrument selected resulted in a lack of reliability and validity with low Cronbach's Alpha scores in each subdimension.

Moreover, several assumptions were mentioned. The first assumption is the belief that wisdom is attainable and learned through a systematic approach. The last is the idea that participants would have the motivation to participate and the ability to follow directions. Furthermore, several limitations were identified. The first limitation was the participant population selected leaders in higher education institutions with limited time in their busy schedules. Next, the inadequate time allotted for the intervention of reading the educational

material. Research indicates the importance of having time to self-reflect and use the cognitive, reflective, and affective capacities to foster wisdom. Hence a limitation can be the time between the pre-and post-exam.

Another limitation is the intervention selected. Research indicates wisdom can be cultivated with engagement in reflection or mindfulness, among other behaviors. Perhaps a different intervention could have been established, such as requiring participants to journal and reflect on wisdom in combination with the material read.

Last, participants were primarily from public institutions, with a low percentage of participants from private institutions. Perhaps a study with a proportional sample of both public and private may yield different results.

Lastly, the study design presented possible difficulties. The study sought participants in leadership roles from higher education institutions in the public and private sectors, presenting several challenges. First, having leaders from institutions of higher education participate with restricted time in their busy schedules possibly limited their time to partake in the study. This factor potentially increased the mortality observed in the control and experimental groups, hampering the ability to create homogenous groups for the control and intervention groups. Finally, this study's scope was limited to a Western view and understanding of wisdom and did not explore the role of culture as a factor in learning, acquiring, and practicing wisdom.

Reliability

Although past studies have demonstrated the reliability of the instrument utilized for this study, the abbreviated 3D-WS-12 measure, this study also conducted a reliability test to confirm reliability in the following sub-dimensions: cognitive, reflective, and affective. However, the SPSS data output addressing Cronbach's Alpha of the abbreviated 3D-WS-12 measure

consisting of 12 items with three subdimensions: cognitive, reflective, and affective demonstrated no significant correlation in each subdimension, indicating that the abbreviated 3D-WS-12 measure does not demonstrate reliability in the three components for this study.

Conclusions Related to Chapters One and Two

Chapters one and two established the foundation for the present study. They showed that wisdom is critical for leaders in a world that suffer from a lack of wisdom. It demonstrated that anyone could grow in wisdom and be cultivated sooner rather than later by performing behaviors that nurture wisdom. Evaluating wisdom from three main perspectives: philosophical, theological, empirical, and linking wisdom and leadership, demonstrated that wisdom benefits society. Considering our world's trials, wisdom is vital for leaders to effectively lead. It confirmed that it is critical to prepare future leaders and human citizens to be intelligent, creative, wise, ethical, and concerned about the well-being of all people regardless of race, ethnicity, gender, cultural, or religious background (Ardelt, 2020, p. 30). Furthermore, it presented studies demonstrating that leaders can and must develop the necessary abilities to learn and practice moral and wise leadership (Bass & Steidlmeier, 1999; Burns, 1978; Ferrero et al., 2020; Sternberg, 2008). This study supports the current call by the research community to research wisdom and leadership.

As a secondary finding, this study contributes to the research linking reading and leadership, showing how reading facilitates language acquisition to further the understanding of concepts such as wisdom. Reading has been recognized as a habit that nurtures wisdom and encourages the development of excellence in leadership. In general, this study's findings support the current concerns in the research community of examining wisdom and furthering our understanding of how to grow, acquire and nurture it. It strengthened the consensus that society

values wisdom, as indicated by the interest of incredibly busy higher education leaders and their participation regardless of their busy schedules.

Contribution to the Literature

Though this study did not yield significant results, it has contributed to the current literature on wisdom, specifically wisdom and leadership, by indicating an interest among higher education institution leaders in wisdom. Additionally, utilizing the abbreviated 3D-WS measure, this study has shown that although a reliable measurement can be used in one study, it does not ensure it will be reliable in another study design. Moreover, it has contributed by supporting the current debate in the literature that wisdom, although the pinnacle of a well-lived life, is not easy to measure. Lastly, it has added to the literature on reading and leadership by displaying higher education leaders' interest in wisdom. This study, however, was exploratory and recognizes that future research is necessary to connect further wisdom and leadership and the possibility that a person can purposefully grow in wisdom.

Suggestions for Future Research

The current study did not yield significant results; therefore, the need for future studies to continue the effort in leadership-related wisdom is vital. There is an agreement in the research community that measuring wisdom can prove challenging. Wisdom is fundamental to human flourishing, and additional research is needed (Gluck et al., 2005, Ardelt, 2004, Baltes et al., 1995; Shoup et al., 2021). Since the 1970s, the study of wisdom has continually evolved. Many scientific theories have emerged and expanded, and to date, the focus has been on measurement, definition, conceptualization, understanding its development, investigating the malleability of wisdom, and applying psychological knowledge about wisdom in life contexts (Staudinger &

Glück, 2011; Zhang et al., 2022; Weststrate & Gluck 2017). Nevertheless, much is yet to be learned about wisdom.

Future studies on wisdom and leaders in higher education institutions can explore measuring wisdom utilizing an explicit research method, such as hypothetical question scenarios, as opposed to this study, which focused on using the abbreviated 3D-WS measurement. Another recommendation is for future studies to conduct their research in a different timeframe when leaders in institutions of higher education may be at work versus during summertime when this study was done, and many participants were on summer break. Or, future researchers may consider repeating the study while considering the role of culture and context in the results obtained. Mickler and Staudinger (2008) also suggest it would be interesting to examine the development of personal wisdom vs. general wisdom across time and its antecedents.

Furthermore, conducting studies on self-reflection has been shown to support deeper levels of learning and wisdom growth (Roberts, 2008; Weststrate & Gluck, 2017). Perhaps a future study that allows leaders in higher education institutions to self-reflect may be beneficial. According to "preliminary research in this area, it shows that training in structured self-reflection leads to immediate increases in personal wisdom" (Weststrate & Gluck 2017, p. 811). Finally, as recognized, research in leadership and wisdom is limited, and many approaches are yet to be explored. The field of wisdom and leadership is open for new and innovative ways to research, understand, and cultivate wisdom in the soil of leadership. More research on wisdom is needed, specifically in leadership and wisdom. Much is yet to be learned, and the time is now.

Implications for Leadership Research and Practices

In her dissertation, Clayton (1976) elevates the lessons learned from Piaget in his study to understand an individual's intellectual abilities, asserting how "careful observation of this

process led him to conclude that intelligence can develop only through the interaction of the individual with the environment. This lesson is an important one for the assessment of wisdom" (p. 67). This conclusion was only established forty-seven years ago. Wisdom in the empirical world has grown, and though many studies have been conducted, much is yet to be understood on wisdom. Researchers argue that "wisdom is not just a way of thinking about things; it is a way of doing things. If people wish to be wise, they must act wisely, not just think wisely. We all can" (Sternberg, 2005, p. 252). Wisdom is a way of thinking, being, and living a good life. However, wisdom is diminishing and often lacking in today's leaders.

Wisdom is required to successfully navigate the ambiguities of life and effectively manage the competing storylines of daily life. Searching to understand and cultivate wisdom is not a challenge for the future, "it is the future because the future is not something people enter, it is something people help create" (Baltes & Staudinger, 1993, p. 80). As a research community, we must continue our efforts to understand, cultivate, and grow in wisdom, not only for us as individuals but for the benefit of our world. "Wisdom is not merely an abstract concept, but a real-life resource used daily to enhance human lives" (Weststrate et al., 2016, p. 1). Wisdom is the key to human flourishing and thriving leaders. And yet, it appears the world is in a severe wisdom drought, with a resounding and unanswered *why*?

There is an agreement in the research community that wisdom is vital. It is the path to successful living, the highest form of understanding, and a crucial trait for leaders to guide and manage the complexities of leadership effectively. The attainment of wisdom is not easy. It may be arduous, requiring critical self-examination, in which not every person wants to engage. Nonetheless, it is vital to succeeding in today's complex and constantly changing world (Glück, 2020). Socrates affirmed that the unexamined life is not worth living, a sentiment shared

thousands of years later by current empirical studies that argue that self-reflection is a habit for supporting the acquisition of wisdom. So why are leaders not engaged in self-reflection, examining life, or growing in wisdom?

Leaders are bombarded with many demands from emails, meetings, conferences, and trying to meet society's utilitarian profit demands; it may seem an unachievable task to set aside time to self-reflect, slow down life's pace, and nurture and grow in wisdom. In today's cyber society, perhaps wisdom is being replaced by artificial wisdom-quick read, rules, procedures, and incentives that keep us busy but take us nowhere. The questions remain: What prevents people from seeking wisdom, and how can they nurture and grow it in this complex and fast-paced life? How can the wonder of wisdom, pursuit, and love for the highest enlightenment be attained? As Theodore Roosevelt firmly stated that "the credit belongs to the man who is actually in the arena." Wisdom, too, perhaps, will only flourish in the person who seeks it and is willing to do the hard work required to grow it.

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APPENDICES

Appendix A: Informed Consent / Recruitment Email–First Phase

Dissertation Research Invitation

Dear Prospective Participant,

My name is Nora M. Gonzalez, and I am a Ph.D. candidate at California Baptist University. For my dissertation research, I am examining the understanding of wisdom among leaders in higher education. Given your position in higher education, I would like to invite you to participate in this research study. The study will require approximately ten to thirty-five minutes of your time, depending upon which group you are randomly assigned. There are no foreseeable risks, with a potential benefit of acquiring knowledge in the subject of wisdom. You will be asked to complete two surveys and, depending on what group you are randomly assigned to, read an excerpt from the book Pursuing Wisdom: A Primer for Leaders and Learners (2021).

By replying to the survey, you acknowledge:

- Your voluntary participation in this study.
- You may discontinue participation at any time with no penalty.
- You understand that your responses are confidential and will be aggregated with other responses without identifying the information of the participants.
- You will receive subsequent e-mails with directions to the study

Please click on the following link to complete the final survey: Take the Survey

Thank you for taking the time to assist me in my educational endeavors. Please contact me at Noramaria.Gonzalez@calbaptist.edu or my chair Dr. John Shoup by dissertation chair, at jshoup@calbaptist.edu if you require additional information or have questions.

Sincerely,

Nora M. Gonzalez

Follow the link to opt out of future emails: Click here to unsubscribe

CBU Dr. Paul & Annie Kienel LEADERSHIP INSTITUTE

Nora M. Gonzalez, PhD Candidate '23

Ph.D. Leadership Studies Student '23

Dr. Paul & Annie Kienel Leadership Institute

Leadership Studies

noramaria.gonzalez@calbaptist.edu

Appendix B: Second Phase Control Group-Post Survey

Dear Participant,

Thank you for participating in my dissertation research on wisdom and leadership. As part of phase two, I am asking you to complete a final survey concluding your participation in my dissertation research study.

The following is the link to 12 questions and two open-ended questions. The sixteen questions should take about 5 minutes to complete. I ask that you complete the questions as soon as possible.

Please click on the following link to complete the final survey: Take the Survey

Thank you for taking the time to assist me in my educational endeavors. Please contact me at Noramaria.Gonzalez@calbaptist.edu or Dr. John Shoup by dissertation chair at jshoup@calbaptist.edu if you require additional information or have questions.

Sincerely,

Nora M. Gonzalez

CBU Dr. Paul & Annie Kienel LEADERSHIP INSTITUTE

Nora M. Gonzalez, PhD Candidate '23

Ph.D. Leadership Studies Student '23

Dr. Paul & Annie Kienel Leadership Institute

Leadership Studies

noramaria.gonzalez@calbaptist.edu

Appendix C: Second Phase Experimental Group-Excerpt on Wisdom

Dear Participant,

Thank you for participating in phase one of my dissertation research on wisdom and leadership. As part of phase two, please read the excerpt from the book, Pursuing Wisdom: A Primer for Leaders and Learners (2021) provided in the link below within the next two weeks. At that time, I will contact you with a final survey concluding your participation in my dissertation research study.

Please click on the following link to complete the final survey: Take the Survey

Thank you for taking the time to assist me in my educational endeavors. Please contact me at Noramaria.Gonzalez@calbaptist.edu or Dr. John Shoup by dissertation chair at jshoup@calbaptist.edu if you require additional information or have questions.

Sincerely,

Nora M. Gonzalez

CBU Dr. Paul & Annie Kienel LEADERSHIP INSTITUTE

Nora M. Gonzalez, PhD Candidate '23

Ph.D. Leadership Studies Student '23

Dr. Paul & Annie Kienel Leadership Institute

Leadership Studies

noramaria.gonzalez@calbaptist.edu

Appendix D: Second Phase Experimental Group-Post Survey

Dear Participant,

Thank you for participating in my dissertation research on wisdom and leadership. As part of phase two, I am asking you to complete a final survey concluding your participation in my dissertation research study.

The following is the link to 12 questions and four open-ended questions. The sixteen questions should take about 5 minutes to complete. I ask that you complete the questions as soon as possible.

Please click on the following link to complete the final survey: Take the Survey

Thank you for taking the time to assist me in my educational endeavors. Please contact me at Noramaria.Gonzalez@calbaptist.edu or Dr. John Shoup by dissertation chair at jshoup@calbaptist.edu if you require additional information or have questions.

Sincerely,

Nora M. Gonzalez

CBU Dr. Paul & Annie Kienel LEADERSHIP INSTITUTE

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Appendix E: Three-Dimensional Wisdom Scale-12

PsycTESTS

Three-Dimensional Wisdom Scale—12

PsycTESTS Citation:
Thomas, M. L., Bangen, K. J., Ardelt, M., & Jeste, D. V. (2017). Three-Dimensional Wisdom Scale—12 [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t58234-000

Instrument Type:
Inventory/Questionnaire

Test Format:
This 12-item measure utilizes five ordered categorical response options (1 = "strongly agree" or "definitely true of myself" through 5 = "strongly disagree" or "not true of myself").

Source:
Thomas, Michael L., Bangen, Katherine J., Ardelt, Monika, & Jeste, Dilip V. (2017). Development of a 12-item abbreviated Three-Dimensional Wisdom Scale (3D-WS-12): Item selection and psychometric properties. Assessment, Vol 24(1), 71-82. doi: https://dx.doi.org/10.1177/1073191115595714, © 2017 by SAGE Publications. Reproduced by Permission of SAGE Publications.

PsycTESTS®

doi: http://dx.doi.org/10.1037/t58234-000

Three-Dimensional Wisdom Scale—12
3D-WS-12

Items

Cognitive Dimension

1. A problem has little attraction for me if I don't think it has a solution.
2. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.
3. I prefer just to let things happen rather than try to understand why they turned out that way.
4. I am hesitant about making important decisions after thinking about them.

Reflective Dimension

5. When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information (reversed).
6. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.
7. When I look back on what has happened to me, I can't help feeling resentful.
8. I either get very angry or depressed if things go wrong.

Affective (Compassionate) Dimension

9. I can be comfortable with all kinds of people (reversed).
10. Sometimes I feel a real compassion for everyone (reversed).
11. I don't like to get involved in listening to another person's troubles.
12. I'm easily irritated by people who argue with me.

Note. Response options range from 1 = strongly agree or definitely true of myself through 5 = strongly disagree or not true of myself.

Appendix F

Dissertation Formatting Checklist

This checklist serves as a final reminder of the main format requirements. Please complete the two lists below **BEFORE** submitting your dissertation to the Ph.D. in Leadership Studies program director for format review.

- The title page is formatted correctly
- o Abstract is a maximum of 250 words and is formatted correctly
- 1" top, left, right, and bottom margins
- 12-point Times New Roman or Courier font
- Double spacing throughout the document
- Pagination is continuous, and the placement of numbers is consistent throughout
- All pages are in order
- The Front Matter is in the proper order
- The table of Contents meets the specified format
- Chapter titles meet the specified format and are consistent throughout the manuscript
- Oversized material is in one of the three alternative formats
- Tables and Figures are consistent with APA guidelines
- Institutional Review Board clearance documentation is the very last page of the dissertation and is not included in the pagination

Please ensure that you closely adhere to **ALL** format requirements specified in the Ph.D. Dissertation Formatting Guide and the most updated edition of the APA manual. The Ph.D. program director or designee will sign this form once all requirements are satisfied and any necessary revisions have been made.

By signing here, the doctoral candidate, _____
Confirms adherence to the required dissertation format criteria outlined in the Ph.D. Dissertation Format Guide.

_____ _____
Signature Date

By signing here, the Ph.D. in Leadership Studies program representative,
_____, confirms that he/she has reviewed the candidate's dissertation for adherence to all formatting requirements and that the dissertation is ready for submission to the CBU Institutional Repository.

_____ _____
Signature Date

Institutional Review Board Clearance Documentation

Institutional Review Board
Nora Maria Gonzalez
Institutional Review Board; John Shoup
CC: Institutional Review Board

RE: IRB Review
IRB No.: 087-2122-EXP
Project: Wisdom and Leadership

Date Complete Application Received: 3/29
Date Final Revision Received: NA

Principle Investigator: Nora Gonzalez

Faculty Advisor: John Shoup

College/Department: Leadership Institute

IRB Determination: Expedited Application Approved (Note Condition) – Student research using anonymous survey questionnaires; no minor participants; no more than minimal risk/risk appropriately mitigated; no deception utilized; acceptable consent procedures and documentation gave the study; acceptable data protection procedures. Data collection may begin with the final submitted documents and approved protocol.

Condition of Approval: Prior to disseminating, please include contact information for the IRB in the informed consent for potential participants if they have questions and would like to contact someone other than the researchers.
Future Correspondence: All future correspondence about this project must include all PIs, Co-PIs, and Faculty Advisors (as relevant) and reference the assigned IRB number.

Approval Information: In the case of an unforeseen risk/adverse experience, please report this to the IRB immediately using the appropriate forms. Requests for a change to the protocol must be submitted for IRB review and approved prior to implementation. At the completion of the project, you are to submit a Research Closure Form.

Researcher Responsibilities: The researcher is responsible for ensuring that the research is conducted in the manner outlined in the IRB application and that all reporting requirements are met. Please refer to this approval and to the IRB handbook for more information.

Date: April 13, 2022