Characteristics of Wisdom in Older Adults:
A Review of the Literature

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Abstract

Wisdom is an ancient and elusive concept, one with great relevance for the world today. Climate change, global political instability, and the increasingly complex problems facing humanity make wisdom particularly important now. There are notable parallels between how world leadership does not provide the needed urgent attention to the challenge of climate change, environmental stewardship, and human rights, and how elders are dismissed and diminished in many societies. Elders in the past were revered for their wisdom; unfortunately, their vital role in current society has shifted due to the fast pace of life and technological advances, with many wondering whether the challenges associated with these issues will serve humanity or contribute to our demise. This literature review will highlight: the intersections between ancient and contemporary views on wisdom as it relates to life satisfaction; intelligence versus wisdom-related knowledge; the importance of religion and spirituality to older adults; and mortality and ethics in society.

Keywords: Wisdom; Older adults; Climate change; Intellectual versus wisdom-related knowledge

Dedication

Firstly, I would like to thank God, from whom all wisdom originates (Proverbs 2, Holy Bible, New International Version).

I am mindful that all world religions, Indigenous cultures, and spiritual practices merit respect. Indigenous peoples all over the world have suffered the loss of their land, culture, freedom, and lives. It is time for everyone to recognize that we are all bound by our humanity. Valuing and respecting the rights of all individuals is critical to our collective survival as the human race.

I dedicate this wisdom literature review to my mother, Genevieve Miller-Elsner, whose guidance, support, prayers, and Christian foundation have guided me my entire life. I also dedicate it to my aunts and uncles, now in their 90s, and especially my Aunt Carol Bullinger, who has demonstrated strength, wisdom, and resilience. Her support all my life has meant the world to me.

Additionally, I dedicate this wisdom literature review to my many senior mentors from whom I have had the privilege of learning, including Mary Albrecht, now a centenarian. Mary was the influential person in my life who taught me that age is only a number. She valued university education, had received her second master's degree at 55, and encouraged me to pursue my Bachelor of Science degree, with a concentration in aging, at Portland State University. I also dedicate this work to Buff Flegal, Ric Levendosky, Marilyn and Bob Macdonald, Katherine Minton, Elaine and Bill Rea, Emma Scales, Donna and Gene Sele, and Gayle Smiley. I am profoundly grateful for three influential people in my life who are sadly not on this planet anymore: Rene Minshew, a treasured mentor who guided and taught me many valuable spiritual concepts; Terri Hayes, my dear, soulful cousin; and my former husband, Steven Scales. Terri and Steven gave me invaluable, irreplaceable friendships and deep love that I treasure to this day.

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I am so thankful to my senior supervisor, Dr. Habib Chaudhury, for approving my request to conduct a wisdom literature review for my final MA Capstone Project Proposal. This was an enormous undertaking that went through many iterations over the past two years. I sincerely appreciate Habib's openness, his calm, steady demeanour, his character, and his wisdom as chair of the Gerontology Department at SFU. I am extremely fortunate to have been guided by your mentorship and research. I have enjoyed learning from you and Dr. Atiya Mahmood and am very thankful for the direction and feedback you both provided early on in my wisdom research and writing.

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I would like to thank all of the wisdom researchers whose commitment to furthering the study of wisdom has been a great service to the fields of gerontology, psychology, and sociology. I would especially like to acknowledge a few of the researchers whose work I particularly admired and learned from: Drs. Monica Ardelt, Paul B. Baltes, Mihaly Csikszentmihalyi, Kevin Rathunde, Erik H. Erikson, Joan M. Erikson, Helen Q. Kivnick, Judith Glück, Susan Bluck, Ursula M. Staudinger, Robert J. Sternberg, David Suzuki, Peter Knudtson, and Jeffrey Dean Webster.

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Chapter 1.

Introduction

Wisdom is an ancient concept with historical origins in philosophy, religion, and the earliest known cultures (Jeste & Vahia, 2008; Takahashi, 2000; Birren & Svensson, 2005, as cited in Sternberg & Jordon, 2005). The history of wisdom is filled with sacred writings, parables, proverbs, songs, short stories, and oral traditions (Wood, 1967, as cited in Holliday & Chandler, 1986). These writings have been shared by many cultures for thousands of years, beginning with ancient wisdom literature from Egypt and Mesopotamia dating to before 2500 BC (Bryce, 1979, as cited in Holliday & Chandler, 1986). Eastern wisdom traditions in India date back to the fourth and third millennia BC. The Chinese civilization is estimated to have originated 7,000 years ago and has a diverse history. (Durant, 1935; Birren & Swensson, as cited in Sternberg & Jordon, 2005).

This literature review will highlight how these traditions have influenced current views of wisdom. The characteristics of wisdom in older adults, combined with modern conceptualizations and empirical studies of wisdom by psychologists and sociologists over the past 60 years, will be highlighted. The important topic of wisdom in relationship to older adults and climate change is particularly relevant because both are currently at crisis levels in terms of being dismissed, despite requiring urgent attention and action from leaders. As Erik Erikson (1997) noted:

> Lacking a culturally viable ideal of old age, our civilization does not really harbor a concept of the whole life. As a result, our society does not know how to integrate elders into its primary patterns and conventions or into its vital functioning. Rather than being included, aged individuals are often ostracized, neglected, and overlooked; elders are seen no longer as bearers of wisdom but as embodiments of shame. (Erikson & Erikson, 1997, p. 114).

Specifically, this literature review will emphasize the relevant intersections between ancient and contemporary views on wisdom and older adults. Wisdom scholars' empirical and conceptual views on well-being and satisfaction, climate change, morality, ethics, current political leadership, and other relevant topics are discussed. As wisdom

scholars suggest, wisdom is as vitally relevant today as it was in ancient times (Knudtson & Suzuki, 2006; Csikszentmihalyi & Rathunde, 1990, as cited in Sternberg, 1990).

My intent is to incorporate a broad cultural approach in this literature review. My motivation for taking an inclusive approach is to embrace diverse cultural and religious perspectives as well as the views of many respected researchers, authors, and scientists. Many prominent, progressive thinkers point to the current destructive political and ethical disengagement in the world (Bandura, 1999; Sternberg, 2002, 2005a, 2005b, 2008, 2013, as cited in Ferrari & Weststrate, 2013). Wisdom is needed by world leaders, researchers, and individual citizens on a global level to address life-threatening climate change and increasingly complex problems facing our human existence, such as global food shortages, nuclear weapons, massive petro-chemical spills, water pollution, invasive species, and habitat loss (Beckford et al., 2010; Knudtson & Suzuki, 2006; Intergovernmental Panel on Climate Change, 2018).

In 2018, world leaders, media organizations, and the general public received strong warnings from the U.N. Secretary-General, António Guterres, and the United Nations' Intergovernmental Panel on Climate Change (IPCC), urging immediate action to address climate change. Guterres warned of the risks of "runaway climate change, calling on world leaders to take drastic steps to limit greenhouse gas emissions within the next two years" (DemocracyNow.org). The IPCC, comprised of widely respected global scientists, states that we are already seeing the drastic effects of climate change. The devastating reality is that if we continue to rely on fossil fuels and do not significantly lower greenhouse gas emissions, by 2040 the world will witness "global food shortages, and $54 trillion dollars in climate related costs" (Aronoff, 2018).

Climate change has real health consequences for all individuals, especially older adults and those with existing health concerns. According to the 2014 Canadian Chief Public Health Officer's report on climate change, public health officials are already seeing increases in "asthma and allergies, respiratory diseases, cancer and cardiovascular diseases and stroke associated with decreased air quality; infectious diseases related to changes in vector biology and migration and water and food contamination; and mental health and stress-related disorders" (Government of Canada, 2014). Based on the urgent news from the U.N. Secretary-General and the IPCC, and

the Canadian Chief Public Health officer's reports, now is the time for action. World leaders must begin to act with wisdom, humility, and ethics to protect the environment and safeguard all citizens' health.

In reference to older adults, Erik Erikson stated that individuals and society are "intricately woven, dynamically interrelated," and must be recognized within the social context; "lacking a culturally viable context of old age, our civilization does not really harbor a concept of the whole life" (Erikson & Erikson, 1997, p. 114). From this perspective, Erikson notes that society does not value old age and does not know how to effectively incorporate the wisdom of elders. This lack of inclusion results in older adults "often [being] ostracized, neglected, and overlooked; elders are seen no longer as bearers of wisdom but as embodiments of shame" (Erikson & Erikson, 1997, p. 114). Several researchers acknowledge that rapid social change coupled with increases in technology often result in the loss of older adults' sense of status in society (Ardelt 2000a; Moody, 1986, as cited in Ardelt, 2010; Birren & Sevensson, 2005, as cited in Sternberg & Jordon, 2005). As society and culture change with increasing speed, the world in which a person matures and grows old is radically different from the world of their youth, and the wisdom acquired over their lives can seem out of date. Others maintain that adaptation to rapid change is more detrimental to older adults than younger adults (Birren & Sevensson, 2005, as cited in Sternberg & Jordon). Sternberg and others suggest that with the increased pace of change in society, the life experience of older adults "actually is worth less, and hence they are valued less" (Sternberg, 2005, p. 18). The result is that the wonderful wisdom they have gained is not integrated into current mainstream society. I view this as a tragic loss for our communities and world.

According to Erikson, the issue is whether society will begin to understand and revere elders in society—whether we have the willingness to shift our perspectives and values to honour the wisdom of elders. It would be unfortunate if we continue to distance our elders from society, placing them in large suburban residential eldercare developments and dismissing their willingness to contribute (E. Erikson, 1997; J. Erikson, 1997). Erikson et al. (1987) further state:

> Among the poorest people in any society have always been the elderly, the infirm, and the frail. Even now, in our society, in spite of Social Security benefits, pensions and Medicare, many elders are among the poorest of the poor— especially the women. In a technological society, all of the

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continuities that offered elders status and even a fringe role as a financially productive worker (farmer, chemist, butcher, baker) have been lost in the vast changes created by a racing technology. The old have thus been forced into the position of supplicants at a point in history when their role identities as storytellers, historians, counselors, and arbiters of disputes have all but disappeared and when their personal sense of personal dignity is threatened by those who have the power and means to alleviate their needs. (Erikson, Erikson, & Kivnick, 1986, p. 302)

Climate change, wisdom, and older adults are interrelated concepts. Kruger and colleagues highlight intergenerational efforts to address the unprecedented rate of climate change in relation to the Universal Declaration of Human Rights (Kruger, Savage, & Newsham, 2015). They suggest that the concept of sustainability is theoretically intergenerational in nature, meaning all age groups can make efforts to leave the world better for future generations. As a society, we have the opportunity to create a new paradigm in which all generations work to protect the environment and promote social equity to respect the dignity of all individuals (Kruger et al., 2015).

These researchers provide excellent suggestions for achieving intergenerational collaboration between young adults (aged 25–49) and older adults (65+). Wright and Lund (2000) suggest working with organizations such as the Environmental Alliance for Senior Involvement (www.easi.org). This organization works to connect seniors with volunteer opportunities and sustainable projects in their local communities and enables them to be part of a larger movement in 20 countries. Such opportunities are essential for engaged seniors to be actively involved in sustainability and climate change discussions so their views and opinions are acknowledged (Wright & Lund, 2000; Kruger et al., 2015).

In recent discussions on sustainability, a controversial issue has been whether older adults are willing to act to promote sustainability. Kellert (1996) "reported that older adults tend to hold different views consistent with the right of human beings to exert dominion over the environment and to place economic and social interests over protecting natural areas" (Keller, 1996, p. 33, as cited in Kruger et al., 2015). Contrary to this view, Wright and Lund (2000) indicated that some older adults show a greater interest than middle-aged adults in sustainability and the environment that they will leave for future generations (Wright & Lund, as cited in Kruger et al., 2015).

In 1986, Erik Erikson, Joan Erikson, and Helen Kivnick published Vital Involvement in Old Age. The eight stages of Eriksonian approach to psychosocial development, are highlighted. In stage two, Generativity and Stagnation: Care, "the experiences of caring, nurturing, and maintaining—which are the essence of generativity make of the stages of a life cycle" (E. Erikson, J. Erikson, & Kivnick, 1986, p. 73). In addition, as an elder reviews their lives "reconciling lifelong generativity and stagnation" they commit to taking "active responsibility for nurturing the next generation" as contributions to maintaining the world for future generations (Erikson, 1966; Erikson, Erikson, & Kivnick, 1986). This is further explained as "grand-generativity" in which older adults expand their roles as "aging parent, grandparent, old friend, mentor, consultant, advisor, and mentor" to include expanding opportunities for social opportunities and environmental concerns for the world (Erikson, 1966; Erikson, Erikson, & Kivnick, 1986).

In Canada, researchers Clinton Beckford, Clint Jacobs, Naomi Williams, and Russell Nahdee have highlighted the Aboriginal environmental wisdom, stewardship, and sustainability of the Walpole Island First Nation in Ontario, examining this group's environmental philosophy (Beckford et al., 2010). This is an important article because it puts into context the reality of Western science's narrow scope, which has often dismissed the sustainable practices and views of Indigenous and First Nations elders. The Walpole Island First Nation provides excellent examples of collaborative efforts between mainstream organizations, universities, and institutions to address significant environmental issues affecting the lives of this First Nation community (Beckford et al., 2010).

In their book *Wisdom of the Elders*, Knudtson and Suzuki (2006) argue:

> In mainstream Western society it has long been relatively easy to embrace elements of traditional Native knowledge about nature, as long as they are suitably couched in sentimental, romantic, or culturally subordinate terms. . . . But the instant that Native visions of the natural world and the intellectual capacities of the generations of Native minds that helped shape them are presented as on par with the vaunted Western ideas, presumed by many to have long since superseded and displaced them, our cultural and racial biases often become more apparent. (p. 5, as cited in Beckford et al., 2010, p. 240)

Since 2008, Beckford and his colleagues have argued for the inclusion of Indigenous views and approaches in educational teaching environments, alongside the Western

scientific perspective (Beckford, 2008, as cited in Beckford et al., 2010). They advocate for educating students on the impact of climate change from the perspectives of Inuit and Cree in the Canadian Arctic and how unpredictable ice conditions have affected hunting, fishing, and trapping in these regions (Beckford et al., 2010).

The Walpole Island First Nation is internationally recognized for establishing the Walpole Island Heritage Centre and for emerging as a leader among Canadian Aboriginal communities in environmental advocacy, sustainable development, and research. The leadership at the Walpole Island Heritage Centre successfully bridged Aboriginal traditional knowledge with Western scientific knowledge to solve environmental problems by establishing strategic research partnerships with Western universities and agencies (Beckford et al., 2010). The main environmental problems addressed have included petrochemical spills and water pollution in the St. Claire River, habitat degradation and destruction, wildlife loss, invasive species, and pesticide use, coupled with environmental damage from both Canadian and American sewage treatment plants (Beckford et al., 2010). The Walpole Island First Nation experience showcases a "high level of environmental consciousness and respect for the environment" (Beckford et al., 2010) while also acknowledging that there are still environmental and economic challenges ahead. There is a realization that "declines in traditional values and cultures [have] led to adverse environmental impacts," which are challenges that all Indigenous societies must face (Beckford et al., 2010, p. 247).

Many believe that now more than ever, open-minded and inclusive approaches embracing views from various distinct populations are critical for our survival. By striving to embrace an inclusive world view based on the collective wisdom of great minds, we have the potential to utilize this immense wisdom to create a fair and equitable world for all Earth's inhabitants. We must view the world's resources as sacred and held in trust for future generations (Beckford et al., 2010; Kruger et al., 2015).

Chapter 2.

Methods

This capstone project will employ several research techniques to identify relevant empirical and conceptual articles to conduct a review on the topic of wisdom and older adults. There is much to be gained from this review and synthesis of wisdom and aging literature by integrating a variety conceptual and historical perspectives. The literature review will be guided by the research question: What is the nature and role of wisdom in later life? The following databases will be used for the research: Ageline, CINAL, Medline, and PsycINFO. The following keywords will be used in the search: wisdom, aging, elders, seniors, older adults, and study. The keywords will be used in various combinations. A Boolean search criteria was used for efficiency. Items included in this research will meet the following criteria: articles written in English, publication date of 2000 onwards.

The secondary screening process involved narrowing the search criteria to 2009-2019, peer-reviewed, journal articles, linked to full-text, abstracts, using the search terms wisdom and combination of keywords (aging, elders, seniors, older adults, and study.)

The third screening process involved using the search criteria above and examining both titles, abstracts and removing duplicates. In order, for the articles to be included in this review, they needed to match the following criteria: 1) written in English, 2) published in peer-reviewed journals, 3) empirical research, 4) specific focus on older adults, and 5) stated focus on one or more of the topic areas for this capstone. Reference lists of the included items were examined to identify additional relevant items.

After completing this process, there were 112 peer-reviewed journal articles retrieved from the database searches. There were 15 books included in this review. Additionally, eight external government reports, and six independent non-academic websites were included. The focus of the majority of empirical studies focused on older adults and wisdom. Of the 112 peer-reviewed journal articles included only 32 were conceptual journal articles.

Figure 1 summarizes the literature screening process.
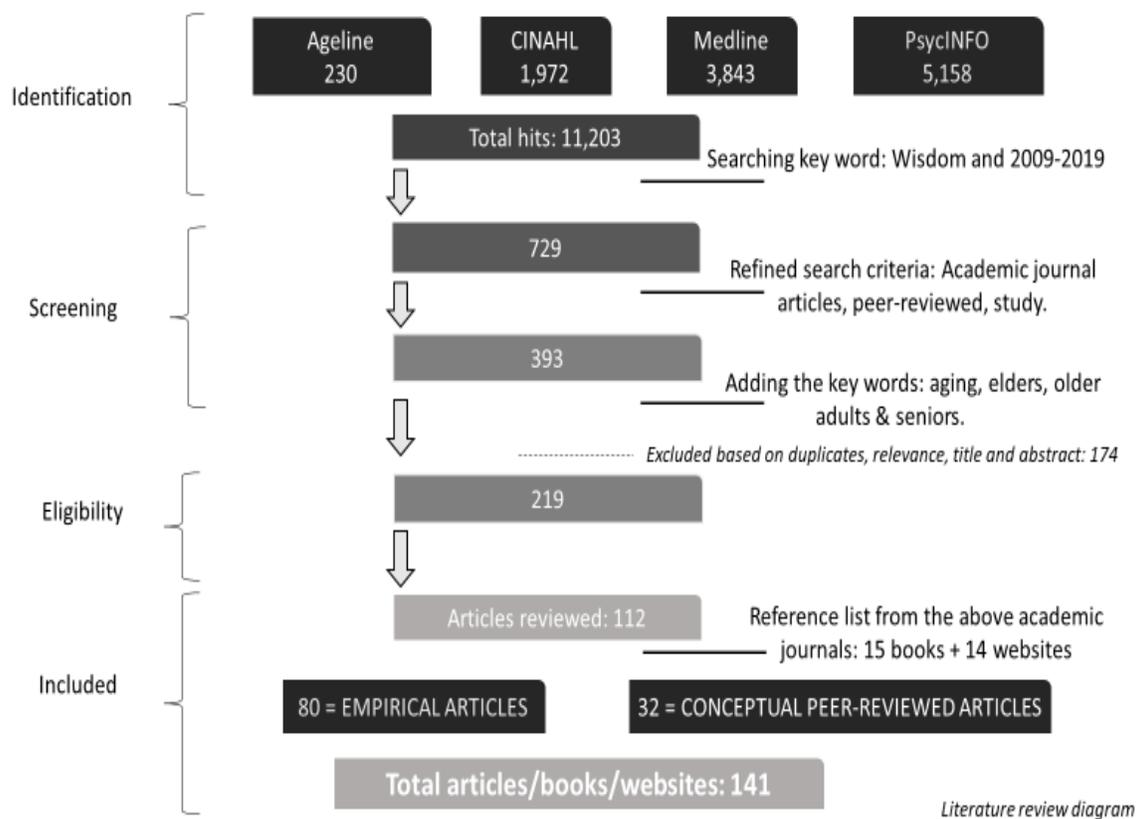
Figure 1. Literature screening process

Table 1. **Transcendent wisdom, conservation value, and challenging life events**

Conservation Value	Security, tradition, conformity	Distinguishes those to benefit and grow from adversity
Transcendent wisdom	Transformation of the self-including biases, subjectivity, and self-centeredness. Transformation of "one's conception and perspective of self and others"	Knowledge, insight, and understanding, and existential dilemmas and being. Transcendent wisdom was negatively related to conservation value.
Accommodation changes	Requires changing one's perspectives and adaptive tendencies.	Stressful life events: Individuals' who score lower on conservation value favor accommodation versus assimilation.
Adaptation	Old, ingrained, habitual patterns associated with projection and self-centered perspectives.	
Assimilation	"Involves incorporating the experience into one's existing schema"	
Macrosocial crisis	Catalyst for self-exploration & dealing with uncertainties in life	War or natural disaster, endorsing conservative value can hinder the development of transcendent wisdom

Thao N. Le, 2008

Transcendent Wisdom: (Curnow, 1999; Le, 2004; Levenson et al., 2005; Orwoll & Perlmutter, 1990; Pascual-Leone, 1990; as cited in Le, 2008, p. 260-261).

Transformation of "one's conception and perspective of self and others" (Ardelt, 1998; Wink & Helson, 1997; Le, 2008, p. 261).

Transcendent wisdom is associated with "meditative insight, arguably related to spiritual/existential experiences, associated with higher stages of ego development. These insights, however, need to be perceived and interpreted with an open mind, rather than through the lenses of security, tradition, and comfort" (Pascual-Leone, 1990; as cited in Le, 2008, p. 272).

Assimilation: "Involves incorporating the experience into one's existing schema" (Le, 2008, p. 262).

Development of wisdom: "Stressful as well as positive life experiences may both facilitate the development of wisdom" (Le, 2008, p. 272).

Chapter 3.

Literature Review

3.1. Overview and History of Wisdom: Ancient Origins of Western Traditions

This section will provide an overview of wisdom, highlighting the ancient Egyptians, Sumerians, and Greeks, and the early Jewish and Christian traditions and their contribution to our current concepts of wisdom. Wisdom is an ancient concept, and since the beginning of time, cultures have shared wisdom through "myths, stories, songs, and cave paintings" dating back thousands of years (Birren & Svensson, 2005, as cited in Sternberg & Jordon, 2005). The Sumerian wisdom writings over 5,000 years ago consisted of philosophical reflections and practical advice for how individuals should live. The Sumerian culture greatly influenced Greek and Roman cultural views of wisdom and the expectations concerning the conduct of individuals within society (Birren & Svensson, 2005, as cited in Sternberg & Jordon, 2005).

The wisdom of the ancient-near east civilizations of Egyptians and Sumerians was shared through parables, proverbs, and short stories. Many of these ancient cultures provided moral advice on living and contributing to society (Wood, 1967, as cited in Holliday & Chandler, 1986). The Egyptian wisdom literature encouraged good behavior, morality, religious duties, and faith in life (Bryce, 1979, as cited in Holliday & Chandler, 1986).

The classical Greek philosophers include Socrates, Plato and Aristotle, who are known for their views on wisdom. These Greeks, known as the "lovers of wisdom…sought to understand the world by using reason rather than relying on religion, authority or tradition to understand life" (Magee, 1988; Birren & Svensson, 2005, p. 4, as cited in Sternberg & Jordon, 2005). The philosophical views of Socrates, Plato, and Aristotle regarding wisdom were distinct in several important ways, with each influencing the way we view the attainment of wisdom. For Socrates (470–399 BC), wisdom came from God, and he viewed knowledge as secondary to living a moral and virtuous life (Holliday & Chandler, 1986; Birren & Swensson, 2005; Sternberg & Jordon, 2005).

Many wisdom researchers have quoted each of these Greek philosophers, including Plato (428–348 BC), who held wisdom in the highest regard while emphasizing an individual's ability to use rational and ethical thinking to make wise decisions (Holliday & Chandler, 1986; Birren & Swensson, 2005; Sternberg & Jordon, 2005).

The Greek philosopher who most influenced Western thinking about wisdom was Aristotle (384–322 BC). Aristotle distinguished between practical and speculative wisdom (Ross, 1908) and believed that in an individual's search for wisdom and understanding, speculative wisdom was the "highest intellectual virtue" and form of knowledge (Ross, 1908, as cited in Holliday & Chandler, 1986, Birren & Swensson, 2005; Sternberg & Jordon, 2005).

3.2. The Early Christian Views of Wisdom into the Middle Ages

This section highlights the period in history after the fall of the Roman Empire and into the Middle Ages, when Christian theology was blended with aspects of Greek philosophy, leading to new perspectives concerning the development of wisdom (Meaghre, 1978; Hyman and Walsh, 1974, as cited in Holliday & Chander, 1986**).**

As Christianity gained prominence, the writings of Greek philosophers were examined for their conformity with Christian doctrine and theology (Cottingham, 1996; Birren & Svensson, 2005, as cited in Sternberg & Jordon, 2005). The Christian doctrine is explained as "the practice of the Christian faith…this doctrine underlines and explains the practice of Christian faith about the doctrine of God, creation, human nature, Christ's redemption, and the church" (Wells, 2017).

St. Augustine and St. Thomas Aquinas both viewed wisdom as coming from God and sought to blend classical philosophy and theology. St. Augustine (345-430 A.D.) believed in God's divine nature and that man was separate from God due to first sin. Augustine viewed intelligence as originating from an individual's understanding of wisdom (*sapienta*) and knowledge of the world (*scientia*) as well as their place in the world in relation to God (Cottingham, 1996; Birren & Svensson, 2005, as cited in Sternberg & Jordon, 2005). Augustine believed that "true wisdom was unattainable" due

to man's fall from God but that individuals could strive to live moral and ethical lives (Holliday & Chandler, 1986).

The Judaic wisdom writings contain some of the most familiar biblical references, found in the books of Proverbs, Job, Ecclesiastes, and Solomon in the Old Testament (Crenshaw, 1976; as cited in Holliday & Chandler, 1986). The story of Job is referenced by several wisdom researchers as an example of someone overcoming tremendous obstacles. In his search for wisdom, Job questions his misfortunes and even questions God (Achenbaum & Orwoll, 1991; Takahashi & Overton, 2005). Through his story, we see the divine relationship between God and man and witness Job's frustration, dismay, and subsequent development of understanding and wisdom through enduring difficult times. In the end, we see God's divine love, guidance, and protection of Job, who has a renewed sense of purpose and dedication to God.

To summarize, in Western traditions, the search for wisdom involved not only a relationship with God but a search for knowledge, principles for correct living, religious duties, and ethical guidelines for society (Bryce, 1979; Holliday & Chandler, 1986; Kirk & Raven, 1960; Takahashi, 2000).

3.3. Eastern Religious Traditions and Empirical Studies of Transcendent Wisdom

The Eastern religious traditions of Buddhism, Confucianism, Taoism, and Hinduism are broad in scope, with a wide range of beliefs held by many diverse cultural groups from India, China, Korea, and Japan (Takahashi, 2000). Eastern views on wisdom are important concepts to include in this review on wisdom and older adults because much of the empirical focus in the literature has been from a Western perspective, which arguably is much too narrow (Takahashi, 2000).

According to Takahashi, "even though the differences between Eastern and Western traditions are fundamental, they are not mutually exclusive and thus some aspects of general systems of the East and West are sometimes in agreement with certain doctrines of the other (e.g., Hinduism/Plato, Taoism/Christian mysticism, Yin/Yang/Hegelian dialectic)" (Sheldon, 1951, as cited in Takahashi, 2000, p. 219). Takahashi and Overton explain that the Eastern views of wisdom embrace a broader

approach, placing value on non-cognitive aspects of wisdom (Takahashi & Overton, 2002). It is important to note that several Western researchers have incorporated and embraced fundamental aspects of Eastern traditions in their empirical studies of wisdom. The integrative features of cognition, affect, reflection, and intuition are aspects of consciousness and important in the development of wisdom (Ardelt, 1997; Clayton & Birren, 1980; Csikszentmihalyi & Rathunde, 1990; Erikson et al., 1986; Orwoll & Perlmutter, 1990, as cited in Takahashi & Overton, 2002).

Eastern and Western researchers and scholars have recognized the value of self-knowledge, detachment, integration, and self-transcendence in the development of wisdom. Curnow suggests that the development of each of these three phases leads to self-transcendence and wisdom. Individuals can develop self-knowledge by detaching from aspects of their lives that typically define how individuals view themselves, such as relationships and achievements. An individual's successful dissolution of ego and threats to self-worth leads to the final phase of achieving integration and self-transcendence (Curnow, 1999, as cited in Levenson et al., 2005).

In 2005, Michael Levenson, Patricia Jennings, Carolyn Aldwin, and Ray Shiraishi conducted a study with 351 individuals aged 18–73. These researchers developed the Adult Self-Transcendence Inventory (ASTI) to measure the construct of transcendence in a variety of age groups (Levenson et al., 2005). Interestingly, this study on self-transcendence revealed that through meditation practice, an individual can achieve self-awareness, resulting in several positive personality characteristics, such as openness to experience, extraversion, and agreeableness (Levenson et al., 2005). Additionally, other interesting findings revealed a positive relationship between self-transcendence and meditation and a decrease in negative personality characteristics, such as neuroticism and alienation (Levenson et al., 2005). Alienation is defined by these researchers as the opposite of positive personality characteristics relating to self-transcendence, which include "extraversion, openness to experience, agreeableness and conscientious" and are enhanced through self-transcendence and meditation (Levenson et al., 2005, p. 138). For older adults who are open to experiences and engagement with others, the development of positive personality traits through transcendence provides the opportunity for growth and decreased social isolation (Levenson et al., 2005). These findings guided the researchers to speculate that by developing self-awareness and a meditation practice of self-transcendence, older adults have the opportunity to

experience the benefits of openness, extraversion, and other positive personality traits, which may alleviate feelings of alienation as they age (Levenson et al., 2005).

In addressing personality development in relationship to self-transcendence and wisdom, Orwoll & Perlmutter agree that when a decrease in self-absorption is accompanied by a greater concern for others, new possibilities arise for individuals (Orwoll & Perlmutter, 1990, as cited in Sternberg, 1990). Orwoll and Perlmutter (1990) highlight three well-known psychologists (Erikson, 1986; Jung, 1953; and Kohut, 1978a) whose personality theories expand on the advantages of moving beyond egocentric concerns towards greater concern for others; this leads to increased self-knowledge and self-transcendence (Orwoll & Perlmutter, 1990, as cited in Sternberg, 1990). These researchers believe that self-transcendence is an essential aspect of wisdom and that there is great value in shifting individualistic views and expanding one's perspectives to consider the needs and concerns of society and the world at large.

Nankee Choi and Christina Landeros highlight how self-transcendence and wisdom develop in the lives of older adults who have experienced and overcome difficulties. This qualitative study with 18 low- and moderate-income older adults aged 63–93 explored their life experiences and how their ability to cope with life challenges have contributed to the development of their views and beliefs about wisdom (Choi & Landeros, 2011). An important aspect of this study is how the participants practiced the qualities of self-transcendence through their interconnectedness and interdependence, patience, and gratitude with and forgiveness for others (Choi & Landeros, 2011).

Choi and Landeros refer to Levenson and colleagues (2005), who suggest that by transcending our cognitive, affective, and conative aspects and shifting out egocentric ways by demonstrating concern for others, we can achieve self-transcendental wisdom (Levenson et al., 2005, as cited in Choi & Landeros, 2011). Similarly, other researchers suggest that when self-centeredness is replaced with cognitive, reflective, and affective qualities, individuals experience growth, feel compassion, and seek justice for others (Le & Levenson, 2004; Orwoll & Perlmutter, 1990; Sternberg, 1990, as cited in Choi & Landeros, 2011).

Choi and Landeros encouraged participants to explore their childhood experiences to see how these had influenced their values and belief systems. The goal

was to articulate life lessons learned from these challenging experiences and reflect on how the individuals practiced wisdom in their current daily lives. Their study added to this literature review by providing examples of how individuals can practice self-transcendence through developing cognitive, reflective, and affective qualities by surpassing earlier life challenges (Choi & Landeros, 2011).

Le's (2008) study explored transcendence in relationship to wisdom and conservation values. Individuals experiencing stressful and uncertain times may rely on conservation values associated with "security, tradition, and conformity," needs typically associated with increased age (Le, 2008). This study of 199 European Americans and Vietnamese Americans revealed that both positive and negative life experiences create a greater tolerance for uncertainty and transcendent wisdom (2008). Interestingly, those "individuals who score lower on conservation value are most likely to engage in accommodation rather than assimilation, to tolerate uncertainties better" (Le, 2008, p. 264). In other words, accommodation requires changing one's perspective on how one views and adapts to life, versus assimilation and acceptance of one's current situation.

The study results indicate that stressful life experiences as well as positive ones may result in positive outcomes. Interview results with European Americans differed greatly from those of Vietnamese Americans, with "European Americans mainly identifying experiences related to work (30%), followed by bereavement (death or loss) (28%), family (17%), health/existential (16%), and macro-social/war events (8%)" (Le, 2008, p. 267). The study interviews revealed that "more than half (54%) of the Vietnamese Americans identified issues related to macro/social war events, with lower importance placed on family, health/existential, bereavement (death or loss), and work" (Le, 2008, p. 267–268). Interestingly, European Americans scored significantly lower on conservation value, but both practical and transcendent wisdom were shown to be significantly higher when compared with scores for Vietnamese Americans (Le, 2008).

With respect to the European Americans' scoring significantly higher on both practical and transcendent wisdom, one might have assumed the opposite, based on the Vietnamese Americans' experience of war and the consequent potential to develop transcendent wisdom. In fact, Le notes, comparing both samples, overall the Vietnamese American participants scored higher on the conservation value, suggesting that safety and security needs are important (Le, 2008). Le suggests that an individual's

growth is influenced by several factors, including work, family, and environments within the individual's social context (Le, 2008). Individuals have the potential to develop wisdom by shifting their perspectives and reactions through reflecting on the significance of their lives (Le, 2008).

This study revealed that individuals who survived wars or had near-death experiences may experience transcendent wisdom (Le, 2008). When people undergo significant life-changing events, these experiences provide the chance for them to gain a deeper perspective through reflection. By viewing all perspectives, individuals have the opportunity to develop transcendent wisdom (Le, 2008).

Chapter 4.

Wisdom & Older Adults

4.1. Empirical Studies: Wisdom, Subjective Well-Being, Life Satisfaction, Happiness & Older Adults

This section will discuss the correlations between wisdom, subjective well-being, life satisfaction, and happiness in the lives of older adults. First, wisdom and happiness will be defined. Next, the differences between subjective well-being and life satisfaction in the context of the research question "What is the nature and role of wisdom in later life?" will be highlighted.

Bergsma & Ardelt's (2012) wisdom and happiness study of 7,037 individuals 60-70 years of age revealed that wisdom and happiness have a modestly positive relationship and that the reflective dimension of wisdom, using the Three-Dimensional Wisdom Scale (3D-WS), was the strongest (p. 481). The reflective dimension of wisdom is characterized by self-examination, self-awareness, self-insight, and the ability to view life from a number of perspectives (Ardelt, 2004).

Bergsma & Ardelt (2012), following Bentham, defined happiness, as an "affective appreciation with one's life" (p. 482) and conceptualized happiness in terms of 'well-being or 'quality of life.' In focusing on quality of life, they refer to Veenhoven's chart of the four qualities of life (see Table 4.1), which classifies happiness according to two distinctions. The vertical dimension, on the one hand, distinguishes between "opportunities for a good life and the actual outcomes of life" (p. 482). This distinction is important because some people do not utilize all of the opportunities offered to them. The horizontal dimension, on the other hand, distinguishes between any external environmental qualities and the internal qualities of the individual.

Table 2.   Four qualities of life

	External life qualities	Internal life qualities
Life Changes	Livability of environment	Life-ability of the person
Life Results	Utility of Life	Satisfaction with life

Bergsma & Ardelt, 2012, p, 483

The upper left quadrant (livability of the environment) represents (external life qualities) life in a good society and opportunities for material success, educational opportunities, political freedom and social quality for citizens. The upper right quadrant represents internal life qualities and life-ability of the person, the extent to which individuals take advantage of opportunities by confronting and managing difficulties in life. The bottom left quadrant (utility of life) represents the concept that a good life must serve a higher purpose. The bottom right quadrant (satisfaction with life) represents an individual's appreciation for the good things in their lives.

As Bergsma and Ardelt suggest, the combination of life-ability and utility of life refers to an individual's realization that life must serve a higher purpose. This provides the opportunity to practice self-acceptance, interact with others in a positive ways as to experience growth and an increased sense of purpose in their lives and life satisfaction (Ryff, 1989; Ryff & Keyes, 1995; as cited in Bergsma & Ardelt, 2012).

In terms of happiness and well-being, following Ryan & Deci (2001), Ryff (1989), Watterman (1993), Bergsma & Ardelt (2012) distinguish between hedonic or subjective well-being, such as happiness, and eudaimonic or psychological well-being, "which refers to the actualization of human potentials, such as growth in wisdom" (p. 486). This is an important distinction because study results indicate "…the relation between wisdom and happiness signifies that happiness gains with greater wisdom tended to be lower among high wisdom scorers than among lower wisdom scorers as wise persons might focus more on eudaimonic well-being rather than hedonic happiness" (Mickler and Staudinger 2008; Staudinger & Gluck 2011; as cited in Bergsma & Ardelt, 2012, p. 494). In other words, the more effort that one uses in searching for hedonic happiness in pursuit self-interests, the less likely individuals would be concerned with achieving eudaimonic well-being or a sense of fulfillment and purpose in life.

Although the researchers do not make the following connection, the fact that the reflective dimension results in the study were significantly higher than the cognitive or affective dimensions, suggests that the qualities of insight and self-awareness of a reflective person, are more aligned with wisdom. Finally, Bergsma & Ardelt note that their findings on happiness among the oldest age groups illustrate a well-known paradox of aging: "happiness tends to increase with advancing age despite age-related

challenges and losses" (Carstensen 1998; Mroczek and Kolarz 1998; as cited in Bergsma & Ardelt, 2012, p. 494).

4.1.1.　　The reciprocal nature of wisdom and well-being

Ardelt's 2016 10-month, two-wave longitudinal study of 123 older adults aged 55–87 years of age examined the reciprocal relationship between wisdom and well-being, attempting to determine "the direction of the relations between old age, wisdom, and physical, psychological (eudaimonic), and subjective (hedonic) well-being" (Ardelt, 2016, p. 1963). The study results revealed that wisdom is bidirectionally associated with physical well-being (p. 1978) and that three-dimensional wisdom is important for the maintenance or even improvement of subjective well-being—as well as mastery and purpose in life—for older adults (Ardelt 2011b; as cited in Ardelt 2016, p. 1977).

This is an important study contributing to empirical findings that three-dimensional wisdom is beneficial to older adults. However, it is also significant for finding that among "10-month retest stability coefficients, which were generally high, especially for SWB and three-dimensional wisdom, a sense of mastery and purpose in life were the least stable" (Ardelt, 2016, p. 1977). Ardelt speculates that this result could be attributed to the physical and social losses that older adults experience as they age (Heckhausen and Schultz 1995; Zautra et al. 1995; as cited in Ardelt, 2016). Importantly, individuals with a higher degree of three-dimensional wisdom at the beginning of the study experienced greater feelings of mastery and purpose in the next phase of the study. This is significant, Ardelt suggests, because "an individual's level of wisdom might concurrently affect their sense of mastery and purpose in life, independent of their past wisdom" (Ardelt, 2016, p. 1978). It is excellent news for older adults that the wisdom gained at this stage in their life has the potential to positively contribute to their sense of mastery and purpose. The findings confirm the hypothesis that wisdom is beneficial for older adults' physical, psychological, and subjective well-being (Ardelt, 2016). Furthermore, "[w]isdom might help elders to feel in control of their lives through active rather than passive coping (Ardelt 2005; Choi and Landeros 2011; Gluck and Bluck 2013; as cited in Ardelt 2016, p. 1978). This study contributes to the literature reporting that as adults age, they can continue to thrive throughout all aspects of their lived experience.

A 2013 study by Sarah Etezadi and Dolores Pushkar explored the relationship between wisdom and emotional well-being in 360 older adults. The researchers specifically measured how problem-focused coping, perceived control, and life engagement enhanced emotional well-being and contributed to the development of wisdom. Etezadi & Pushkar suggest that "from an intuitive and theoretical standpoint," wise individuals experience more happiness and satisfaction (Etezadi & Pushkar, 2013). They point to Brugman (2008) and Ardelt (2003), Bergsma and Ardelt (2012), Webster (2003), and Taylor et al. (2011), whose research variously revealed that wisdom and well-being are indeed correlated. Etezadi and Pushkar assert theirs is the first study of its kind to "empirically demonstrate pathways from wisdom to positive and negative affect"; they found that "wisdom positively predicted 40% of the variance in positive affect through the intervening variable of adaptive coping style (both problem-focused coping and positive reinterpretation), sense of meaning, and perceived control" (Etezadi & Pushkar, 2013, p. 942). They also refer to dispositional coping, describing this as "the ways that people respond to stress, regardless of the nature of the stressor" (Etezadi & Pushkar, 2013). Referencing Lazarus and Folkman's (1984) classic theory of stress, they suggest that individuals can experience positive psychological results through problem-focused, emotion-focused, and meaning-based coping strategies (Folkman & Greer, 2000; Lazarus & Folkman, 1984; as cited in Etezadi & Pushkar, 2013).

Etezadi and Pushkar utilized Ardelt's (2003) three-dimensional wisdom model in their study and demonstrated both theoretically and empirically important mediators between well-being and wisdom. Additionally, their study results demonstrated that wisdom is more associated with positive affect than with negative affect. The qualities that represent positive affect include positive emotions relating to self-development and successfully accomplishing goals in life, versus negative affect (e.g., hopelessness) or negative emotions often associated with self-protective functions (Etezadi & Pushkar, 2013). Their work contributes to the empirical findings that wisdom and well-being are developed through positive affect, although their study also demonstrates the value of regulating negative emotions and the benefit for individuals who are motivated to work through very difficult emotions and situations. Etezadi & Pushkar conclude that wisdom "appears to be largely motivated by higher needs, e.g., psychological growth and meaningfulness" (2013, p. 947).

4.1.2.   Balanced time perspective, well-being, and wisdom across the lifespan

For the past 20 years, wisdom researchers have been interested in how individuals progress within the context of the temporal aspects of time and aging. Researchers Zimbardo and Boyd (1999) suggest that "time perspective" encompasses an individual's perceptions of their past, present, and/or future. They view this perspective "as an unconscious process in which a person's temporal orientation strongly influences psychosocial choices, behaviors, and consequences" (Zimbardo & Boyd, 1999; as cited in Webster, et al., 2014, p.1046). Other researchers, such as Carelli, Wilberg, and Wilberg, view a time perspective as a "temporal lens through which life experiences are filtered" (2011; as cited in Webster et al., 2014, p.1046). Other researchers (e.g., Boniwell, 2009; Boniwell & Zimbardo, 2004; Kazakina, 1999) study "time perspectives and personality traits" in relationship to the "big five" psychological dimensions of personality (Webster et al., 2014).

Incorporating lifespan theories, researchers Timmer, Bode, and Kittman-Kohli (2003) studied 2,924 individuals aged 40 to 85, focusing on developmental perspectives on growing older. This study involved participants in the second half of life, living in the former East or West Germany concerning their priorities, goals, and interests in middle and later life. Timmer et al., 2003, refer to Erikson's theory of identity development highlighting 'two developmental stages in middle and later life' the first generativity, and the second ego-integrity (Erikson et al. (1986). This study revealed participants (40-46 years) were most concerned with generativity, work and dedication to others. The participants aged (47-53 years) known as the 'third age' of life is characterized by hedonistic goals, and personal freedom (Riley, Kahn and Foner, 1994; as cited in Timmer, et al., 2003). During the "fourth age" these researchers found "among the oldest respondents, short-term projects which enrich everyday life are most prominent" (Timmer et al., 2003. p. 20).

The findings from this study "demonstrate that the psychological phenomenon of developmental gains is inseparably intertwined with the context of the circumstances of life" (Timmer, Bode, & Kittman-Kohli, 2003, p. 20; Webster et al., 2014).

Various empirical studies have highlighted developmental aspects with respect to the "importance of both future and past perspectives" in relationship to lifespan perspectives in younger and older adults (Dittman-Kohli & Westerhof, 2000; Webster et al., 2014). Several researchers, including Cartensen (2006), have looked at the "future time perspective" and how this perspective influences "emotional goals" as we age (2014). Specifically, they refer to Cartensen's (2006) socioemotional theory, which postulates that as older adults experience the final phase of development in life, their emotional priorities and goals shift (Charles & Carstensen, 2009; Lang & Cartensen, 2002; Webster et al., 2014). Interestingly, research on reminiscence and life reflection has produced positive findings about psychological well-being and developmental processes as we age (Webster, Bohlmeijer, & Westerhof, 2010; Pasupthi, Weeks, & Rice, 2006; Staudinger, 2001; as cited in Webster et, al., 2014).

A research study by Webster, Bohlmeijer, and Westerhof (2014) focused on time perspective, well-being, positive mental health, and how individuals can flourish throughout their lifespan (Keyes, 2002; Webster et al., 2014). There have also been studies concerning negative, maladaptive, or ruminative reminiscence leading to anxiety and depression, thereby decreasing an individual's well-being (Webster 1993; Korte, Westerhof, & Bohlmeijer, 2012; O'Rourke, Cappeliez, & Claxton, 2011; Webster, 1993; as cited in Webster, Bohlmeijer, Westerhof, 2014).

A balanced time perspective (BTP)

A 2014 study by Webster, Bohlmeijer, and Westerhof of 512 Dutch adults aged 17 to 92 years utilized a new scale, the Balanced Time Perspective Scale (BTPS; Webster, 2011). The researchers measured demographic variables, physical health, personality, well-being, wisdom, and time perspective. The BTPS expanded on the previous Zimbardo Time Perspective Inventory (ZTPI; Zimbardo & Boyd, 1999). Other researchers using the ZTPI found that "balanced time perspective was associated with higher happiness (Boniwell et al., 2010; Drake, Duncan, Sutherland, Abernethy, & Henry, 2008), life satisfaction (Desmyter & De Raedt, 2012; Gao, 2011; Zhang & Howell, 2011), and higher positive mood states, such as energy and hedonic tone (Stolarski et al., 2013; as cited in Webster et al., 2014, p. 1047).

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Webster et al. (2014) investigated BTP in young, midlife, and older adults and concluded that younger adults are more future oriented whereas older adults are interested in reflecting on the past. Interestingly, BTP was shown to be "related to well-being and wisdom across all age groups" (p. 1052). The authors note that autobiographical memories are important in that they provide the opportunity for all individuals to reflect and remember when they overcame a difficult situation, as well as to recall exciting and happy memories, further enhancing their "psychological, emotional and social well-being" (p. 1052). Likewise, dreaming, planning, and setting goals as an individual are ways that achievements and celebrations contribute to the success of future goals and thereby enhance mental health (Webster et al., 2014). This study is interesting for pointing out that middle-aged adults are in an ideal position to draw upon their past experiences and reflect as they plan and set goals for the future, and "as such [they] have the resources and motivation to seek a Balanced Time Perspective (BTP)" (Webster et al., 2014, p. 1053). Notably, middle-aged adults scored the highest on both mental health and wisdom in this study (Webster et al., 2014). Webster et al. provide new insights into the perspectives of young, middle-aged, and older adults, offering positive findings that refute stereotypes about older adults' ways of relating to their past and future. Specifically, in contrast to existing stereotypes, this research study "demonstrates that reminiscing is important to young adults and a positive future orientation is important to elderly adults" (Webster et al., 2014, p. 1053).

4.1.3. Wisdom, life events, well-being, and older adults

For several years, wisdom researchers have expressed interest in studying well-being and life satisfaction in the lives of older adults. The study by Ardelt & Jeste (2016) of 994 respondents aged 51-99 years, focused on the association between adverse life events and well-being. This is an important topic for wisdom researchers because older adults experience various types of loss as they age (Aldwin & Igarshi, 2015). Ardelt & Jeste found that "although adverse events happen at all stages of the life course, older adults are more likely to encounter a serious illness or the death of family members and friends, which negatively impact subjective well-being (SWB)" (Clemence et al., 2007; Kraaij et al., 2002; as cited in Ardelt & Jeste, 2016, p. 1375).

Ardelt & Jeste (2016) describe subjective well-being (SWB) as a "latent variable" (p. 1376) associated with such effect indicators as positive mental health, happiness,

and satisfaction with life. Using both a four-item scale to measure mental health and the Three-Dimensional Wisdom Scale (3D-WS) to assess the cognitive, reflective, and compassionate (affective) dimensions of wisdom, the authors found that in bivariate analyses there was a positive correlation between all three SWB indicators (positive mental health, happiness, and satisfaction with life) and the three dimensions of the 3D-WS. Building on Ardelt (2011a), the authors confirmed that, combined, all three dimensions of 3D-WS had strong associations with emotional regulation, forgiveness, orientation toward personal growth, openness to experiences, purpose in life, and positive relations with others (Ardelt & Jeste, 2016).

And although the authors found cognitive wisdom to have the highest associations with an individual's orientation toward personal growth and autonomy, and openness to experience, only reflective wisdom, characterized by self-examination, self-awareness, self-insight, and a multiperspectival view of life, was strongly associated with SWB as a whole (Ardelt & Jeste, 2016). As such, the authors concluded that "wise elders possess the psychological resources to reflect on phenomena and events from a broader perspective, which enables them to preserve their sense of well-being when confronted by crises and hardships" (p. 1380).

4.1.4. Wisdom, life satisfaction, and transcendence

Thao Le's 2011 study of 123 older Euro-American adults researched wisdom and life satisfaction in relationship to openness, values, and self-transcendence. Le notes that other researchers suggest that wise individuals can achieve and maintain life satisfaction because they are flexible to change during good times as well as challenging times (Ardelt 1997; Kramer 2000; Thomas 1991; as cited in Le, 2011). Although the results of the study could not clearly demonstrate the causal relationship between life satisfaction and wisdom, in terms of which led to the other, they do show a consistent and positive association (Le, 2011, p.179).

In the study, Le built on Ardelt (2000), who, in measuring such life-satisfaction indicators as the congruence between desired and achieved goals, general life satisfaction, and satisfaction with different areas of life, found a link between wisdom and life satisfaction (Le, 2011). Le utilized three different scales to measure wisdom, life satisfaction, and transcendence: Le assessed wisdom utilizing the 3-Dimensional-

Wisdom Scale (3D-WS; Ardelt, 2003); self-transcendence was assessed utilizing the Adult Self-Transcendence Inventory (ASTI; Levenson et al., 2005); and Le utilized the Satisfaction Life Scale (Diener et al., 1985), to assess satisfaction with a person's whole life, with a particular focus on cognitive dimensions, though also affective and behavioral components to a lesser extent (Le, 2011, p.180).

Although several researchers have suggested that life satisfaction is important in the attainment of wisdom, only Ardelt (1997, 2000) has provided empirical evidence to support this (Le, 2011). Ardelt's finding provides empirical evidence that life satisfaction in one's life consists of many aspects including family, social relationships, and objective life conditions (2000). Ardelt argued that "life satisfaction in old age often depends on the general circumstances, vulnerabilities, and strengths of an individual, whereas wisdom is likely to increase life satisfaction for all elderly persons" (Ardelt, 1997, as cited in Ardelt, 2000, p. 384).

Le concluded that "wisdom and life satisfaction are positively intertwined, and that openness at least for European American adults, is an important attribute for life satisfaction, a self-transcendence orientation, and wisdom" (Le, 2011, p. 179). These empirical studies are important and provide additional knowledge in understanding the many aspects that contribute to the study of the nature of wisdom and older adults. The studies by Le, 2011, Ardelt, 1997 and Ardelt, 2000, show the various aspects relating to defining life satisfaction and the important role of life satisfaction in relationship to wisdom in the lives of older adults.

4.2. Empirical Studies: Older Adults, Cognitive, Reflective, and Affective Components of Wisdom

Many empirical studies have shown the value of self-reflection in the acquisition of wisdom. Csikszentmihalyi & Rathunde (1990), for instance, suggest the "pursuit of wisdom through self-reflection is intrinsically rewarding." The self-reflective dimension of wisdom requires an inward focus, in which the mind is quieted and not distracted (Csikszentmihalyi & Rathunde, 1990, p. 39; as cited in Sternberg, 1990). Monica Ardelt's 3D-WS (1997, 2003), which follows the approach of Clayton and Birren (1980), defines wisdom as a composite of cognitive, reflective, and affective components. For Clayton &

Birren, all three dimensions must be present for a person to be considered wise (Clayton and Birren, 1980; as cited in Ardelt, 1988).

Ardelt's integration of cognitive, reflective, and affective qualities defines the three dimensions of wisdom as follows:

(1) Cognitive dimension of wisdom a person's ability to understand life, that is to comprehend the significance and deeper meaning of phenomena and events, particularly with regard to interpersonal and interpersonal matters (Ardelt 2000b; Blanchard Fields and Norris 1995; Chandler and Holliday 1990; Kekes 1983; Sternberg 1990a.

(2) Affective dimension reflects positive emotions and behavior an individual demonstrates toward other beings, such as feelings and acts of sympathy and compassion, and the absence of indifferent or negative emotions and behavior towards others.

(3) Reflective dimension is a prerequisite for the development of cognitive dimension of wisdom. A deeper understanding of life is only possible if one can perceive reality as it is without any major distractions…by looking at phenomena and events from may perspectives to develop self-awareness and self-insight. (Ardelt, 2003, p. 279)

Ardelt's 2000 longitudinal study of 82 women aged 59-81 years of age examines the relationship between wisdom and aging and explores the early antecedents of wisdom. This study aimed to uncover what the preceding circumstances or events in an individual's life that contribute to the development of wisdom as they age. Ardelt hypothesized that having a favorable childhood, developing mature personality characteristics in early adulthood combined with supportive social environments in each phase, would positively contribute to a person's wisdom as an older adult (2000).

This study also revealed that favorable social environments and the development of a mature personality were found to improve the life satisfaction in women's lives as an older adult (Ardelt, 2000). Additional findings revealed that "mature personality characteristics in early adulthood have a positive influence on life satisfaction and relationship quality in old age but are unrelated to wisdom" (Ardelt, 2000, p. 383). However, social environment and mature personality characteristics developed as a young adult, were influenced by socioeconomic factors. Often, women who were employed in lower-paying jobs or were not part of the paid workforce were much more influenced by their development in early adulthood (Ardelt, 2000). Ardelt suggests that higher socioeconomic income freed individuals from various social constrictions as

children and young adults, which allowed them to develop psychologically (Ardelt, 2000, p. 383).

Past studies have either found that benign childhoods favor a person's psyschosocial development (e.g., Erikson, 1963; Heath, 1991; Maslow, 1970)" as cited in Ardelt, 2000, p. 362) or that in cases where unfavourable family conditions have had damaging effects, those can be reduced by later events, such as supportive adult relationships (Allport, 1961; Clausen, 1993; Vaillant, 1977, 1993; as cited in Ardelt, 2000, p. 363). Other studies have found that people who suffered from detrimental childhood environments but also have mature personality characteristics, can successfully pursue wisdom (Bandura, 1995; Clausen, 1993; Health, 1991; as cited in Ardelt, p.363). Similarly, Ardelt's (2000) findings "do not necessarily imply that situational and contextual factors are unimportant in determining a person's psychological well-being during the later years of life" (Ardelt, 2000, p. 384). The objective situations need to be considered when assessing an individual's well-being. Ardelt suggests that future progressive public policy programs in addition to focusing on well-being of older adults, also encourage the psychosocial development of individuals throughout the life-course (Ardelt, 2000).

4.2.1.   The reciprocal relationship between cognitive, affective, and reflective development

In the book, "Wisdom Its Nature, Origins, and Development", Deidre A. Kramer presents her model of wisdom. Kramer suggests that wisdom operates in tandem with cognitive and affective processes allowing the development of skills that will facilitate individuals to gain new perspectives. Consequently, people become better able to deal with the stressor of life. (Kramer, 1990; as cited in Sternberg, 1990). In this model, wisdom is a form of cognition that interacts with affect, for the latter is what motivates the reasoning processes; therefore, they are interdependent. (Haviland & Kramer, 1989; Kramer, 1990; as cited in Sternberg, 1990).

According to Kramer (1990) wisdom should be understood as a dynamic process that requires one to consider contexts of life that will produce psychological adaptation fostering life skills. Often, this is when individuals have the opportunity, to experience growth and the development of wisdom.

Ardelt (2003) points out that many wisdom researchers include cognitive and reflective elements, but often the affective dimension is not acknowledged. Importantly, through the affective dimension of wisdom people can express positive feelings like sympathy, and compassion towards others; however, she proposes that the cognitive and affective dimensions are preceded by the reflective dimension (Ardelt, 2003). Although the reflective dimension is considered the crucial component, and it encourages the cognitive and affective processes, all these three dimensions need to work simultaneously in order to develop wisdom (Clayton & Birren, 1980; Ardelt, 2000a; as cited in Ardelt, 2003)**.** Originally proposed by Clayton and Birren (1980) they affirm that wisdom is an integration of all three dimensions and suggest one is wise when cognitive, affective and reflective dimensions are present (Clayton & Birren, 1980; Ardelt, 2000a; as cited in Ardelt, 2003. However, Webster (2003) argues that the cognitive processes do not necessarily result in wisdom. Without the reflective element, one might have intelligence but not be considered wise because it is the affective dimension that allows one to show important elements of wisdom such compassion and sympathy (Webster, 2003; as cited in Ardelt, 2003).

A study by Holliday & Chandler (1986) show that the cognitive dimension of wisdom is necessary, but it does not automatically translate into wisdom. It might be a factor showing that the individual has some understanding of life but alone, cognitive processes are not enough to be considered wise. Furthermore, they suggest that "wisdom is defined by characteristics from cognitive, interpersonal, and experiential domains" (p. 83). In other words, for one to be considered wise, individuals must have knowledge and be competent in life, skilled in their dealings with other people acting with good judgement and concern for others. As such, concerning wisdom, some researchers agree that the cognitive dimension is not the most important factor and alone it does not equate to wisdom (Holliday & Chandler, 1986; Kramer, 1990, p. 292, as cited in Sternberg, 1990).

In addition, a study by Glück & Bluck (2011) with 1,955 participants, aged 13-93 years of age examined laypeople's conceptions of wisdom identified two conceptions of wisdom. The two conceptions consist of a cognitive component and the integrative conceptions which include cognitive, affective and reflective components. Characteristics of cognitive includes "knowledge and life experience", affective includes "benevolence, empathy, love for humanity" and reflective includes "self-reflection and acceptance" (p.

323). Results show that the affective components are more crucial followed by reflective components. In fact, in this study men were more likely to identify wisdom as a cognitive component, whereas women considered the integrative conception as more central to wisdom (Glück & Bluck, 2011).

Glück & Bluck reveal that about two thirds of participants 30 years and older indicated that an integrative approach to wisdom is the best approach. Characteristics of empathy and concern were rated as important as knowledge and experience in life (Glück & Bluck, 2011). In addition, participants believed that cognitive aspects of wisdom are attained through wide variety of experiences as well as being mentored by wise people in their lives (Glück & Bluck, 2011). Participants who rated integrative conceptions of wisdom as important, strongly believed "the role of emotionally and challenging experiences (negative, uncertain, and spiritual experiences" have a critical role in the development of wisdom (Glück & Bluck, 2011, p. 323). With regards to older adults, there was no significant difference in the way they conceptualize wisdom and how it develops (Glück & Bluck, 2011).

The empirical studies highlighted demonstrate the importance of an integrative approach in the development of wisdom. Researchers over the past forty years, have continued to show the value of cognitive, reflective, and affective qualities, and the importance of each, in the pursuit and of wisdom. As Clayton and Birren (1980) stated all three components are important in the development of wisdom (Clayton & Birren, 1980). These researchers have shown how each component is needed throughout the life course and particularly for older adults who are able to continue learning and acquiring wisdom throughout their lives.

4.2.2. How wisdom benefits older adults at the end of their lives

Ardelt & Edward's empirical study with 197 older adults aged 52-98 years of age, investigated whether wisdom is beneficial for older adults at the end of their lives, when certain external means to enhance well-being disappear (Ardelt & Edwards, 2016, p. 502). This was an interesting study because Ardelt and Edwards identified key factors that influence wisdom and subjective well-being, including physical health, socioeconomic factors, financial situation, social involvement, the association between

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wisdom and well-being between nursing home and hospice sample than community sample, and purpose in life and sense of mastery (Ardelt & Edwards, 2016, p. 502).

Ardelt and Edward's (2015) findings showed that, after controlling for demographics and advantages in life conditions (better subjective health, greater social involvement, less economic pressure, being male, and belonging), three-dimensional wisdom relates positively to SWB. Contrary to what stratification theory, cumulative advantage and disadvantage theory, and prior research (George, 2010) have found, "it appears that wisdom is even more crucial for SWB at the very end of life when health is failing, social involvement declines, and a higher socioeconomic status cannot protect against physical dependency and death" (Ardelt & Edwards, 2016, p. 510). Furthermore, the authors also found that the difference in average SWB between hospice patients and nursing home residents and relatively healthy community residents became smaller with greater wisdom (Ardelt & Edwards, 2016). Additionally, older adults with high wisdom scores continued to experience subjective well-being regardless of their terminal diagnosis (Ardelt & Edwards, 2016).

This study is important because it provides empirical evidence showing that wisdom is valuable for older adults and that subjective well-being is achievable, even in terminable end of life situations (Ardelt & Edwards, 2016). The authors note that this study suggests, "that successful aging also depends on the cognitive, reflective, and compassionate dimensions of wisdom, which might be the result of life-long psychosocial growth" (Erikson, 1982; Maslow, 1971; as cited in Ardelt & Edwards, 2016, p. 511).

4.2.3.   Intellectual versus wisdom-related knowledge across the lifespan

Many researchers have theorized about and studied the differences between intellectual and wisdom-related knowledge in relationship to older adults. Their results suggest that "while intellectual and wisdom-related knowledge share certain characteristics, such as answers to difficult life problems and a quest for truth, they are the complete opposite of each other in many areas (Assman, 1994; Chandler & Holliday, 1990; Clayton & Birren, 1980; Csikszentmihalyi & Rathunde, 1990; Sternberg, 1990a)" (Ardelt, 2000, p. 773).

This section highlights the differences between intellectual and wisdom-related knowledge and intelligence versus wise reasoning in relationship to well-being, life satisfaction. These concepts will be discussed within the context as to whether age is factor in the attainment of wisdom. Several studies will highlight the empirical findings regarding these concepts across the lifespan in young, middle-aged, and older adults.

Ardelt (2000) states that intellectual knowledge provides older adults with the opportunity to engage in the world, whereas wisdom-related knowledge prepares older adults for the "physical and social decline" associated with aging (Ardelt, 2000). Researchers acknowledge the importance for older adults to continue learning throughout their lives, especially in a rapidly changing society (Glendenning, 1995; Moody, 1986; O'Brien, 1992; Thornton, 1986; Willis, 1985, as cited in Ardelt, 2000). This engagement is important, even though some studies have shown that as individuals age, fluid intelligence and abstract problem-solving decline (Baltes, 1993; Baltes & Staudinger, 1993; Glendening, 1995; Moody, 1986; Shuldiner, 1992; Willis, 1985, as cited in Ardelt, 2000).

In general, intellectual knowledge is based on a "scientific, theoretical, abstract, and detached approach" and an impersonal view of life (Strijbos, 1995, as cited in Ardelt, 2000). In comparison, wisdom-related knowledge derives from an individual's spiritual search for "meaning and purpose in life" and for answers to life's biggest questions (Blanchard-Fields & Norris, 1995; Clayton & Birren, 1980, as cited in Ardelt, 2000). Wisdom-related knowledge is achieved through "personal life experiences, self-reflection, self-awareness, and the transcendence of one's subjectivity and projections" (Ardelt, 2000, p. 783). These qualities and openness to experiences all contribute to the acquisition of wisdom (Jarvis, 1992; Keyes, 1983; Kramer, 1990, as cited in Ardelt, 2000). Other researchers agreed, elaborating that wisdom encompasses insight in life which is found through "…exposure to difficult and uncertain questions about the meaning and conduct of life as well as deep reflection upon and critical evaluation of one's experiences" (Glück & Bluck, 2013; Staudinger & Glück, 2011; Sternberg, 2005; as cited in Thomas & Kunzmann, 2013, p. 897).

In 2013, Stefanie Thomas and Ute Kunzman conducted a study with 192 participants ranging in age from 19 to 79 to investigate whether age was a factor in wisdom-related knowledge, having noted that "in several cross-sectional studies utilizing

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the Berlin wisdom tasks, the association between age and wisdom-related-knowledge was nonsignificant and virtually zero" (Thomas & Kunzmann, 2013, p. 897). Acknowledging that wisdom is a rare quality that few individuals ever attain, life-span developmental researchers suggest that adults can potentially acquire wisdom-related knowledge through the problems and challenges they have faced and solved, which are "partly influenced by an individuals' age" (Baltes, 1987; as cited in Thomas & Kunzmann, 2013). Erikson (1968) suggested "older adults may be more likely to gain wisdom-related knowledge about the problems and challenges that surround this theme than their younger counterparts" (Erikson, 1998; as cited in Thomas & Kunzmann, 2013, p. 898). Interestingly, the Thomas & Kunzman (2013) study based on the Berlin wisdom tasks assessing "wisdom-related knowledge about two problem domains (i.e., suicide and marital conflict)" determined that "marital conflict wisdom tasks elicited greater wisdom-related knowledge in young than in older adults" (Baltes, 2004; Baltes et al., 1995; Thomas & Kunzmann, 2013, p. 902). This study is important for contributing to an understanding that all phases of life provide opportunities for individuals to gain wisdom-related knowledge as they seek to resolve issues using openness and personal willingness to work through the challenges they face at any age (Glück & Bluck, 2013; Kunzmann & Baltes, 2005; Staudinger & Kuzmann, 2005; Thomas & Kunzmann, 2013).

Igor Grossmann and Ethan Kross (2014) asked, "[Are] people are wiser when reflecting on other people's problems compared to their own?" In three separate studies of 693 individuals in total, they found that wise reasoning was demonstrated when individuals recognized the "limits of their own knowledge and the importance of compromise and future change, considering other people's perspectives" (Grossman & Kross, 2014, p. 1571). Additionally, in their third study, similar findings were found with young adults (20–40 years) and older adults (60–80 years). Grossmann and Kross (2014) suggest that in this emerging area of study, "pervasive asymmetry characterizes the way people reason about personal issues," meaning that individuals provide wiser reasoning when they contemplate solutions concerning other people's problems rather than their own. This study extends other research, finding that "when older adults reason about conflicts for which they have case-specific information (e.g., conflicts involving close friends), they show the same asymmetry in wisdom as younger adults do" (Grossman & Kross, 2014, p. 1577). Researchers note that both older and young adults benefited from self-distancing, demonstrating that wise reasoning can be utilized by both

age groups. In fact, older adults refrain from anger (Charles & Carsensen, 2008), and 'prefer passive-avoidant coping strategies' compared with younger adults (Blanchard-Fields, Jahnke, & Camp, 1995; as cited in Grossman & Kross, 2014). Furthermore, even if older adults are not able to "reason wisely," they may strive to "maintain their well-being" by distancing themselves from unsettling circumstances (Grossman, Karasawa, Kan, & Kitayama, 2013; as cited in Grossman & Kross, 2014).

4.2.4.   Intelligence, wise reasoning, and well-being across the lifespan

In 2013, Igor Grossmann, Jinkyung Na, Michael Varnum, Shinobu Kitayama, and Richard Nisbett studied 241 participants (25–90 years of age) to assess the relationship between intelligence, wise reasoning, and well-being (Grossmann et al., 2013). Since Aristotle, scholars and laypeople have speculated that individuals with "superior reasoning abilities" experience greater well-being (Campbell, Converse, & Rogers, 1976; as cited in Grossmann et al. (2013).

Grossmann et al. note that several large studies have provided no evidence linking intelligence and well-being (e.g., Sigelman, 1981; Watten, Syverson & Myhrer, 1995; Wirthwein & Rost, 2011; as cited in Grossman et al., 2013). Past research indicates that "abstract reasoning and fluid intelligence" decline as individuals age (Salthouse, 2004; as cited in Grossman, et al., 2013). Meanwhile, other research suggests that older adults experience greater well-being than younger adults (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Mroczek & Kolarz, 1998; as cited in Grossman, et al., 2013).

Grossmann and colleagues suggest "that superior reasoning may, in fact, be related to well-being" if this refers to pragmatic versus abstract reasoning (Grossman et al., 2013). These researchers highlight the established work of Baltes and colleagues and the Berlin paradigm (Baltes & Smith, 2008), as well as "the neo-Piagetian view of reasoning" discussed by Basseches (1980) and Kramer (1983; as cited in Grossman et al., 2013). Grossman and colleagues refer to two studies using the Berlin paradigm exploring the relationship between wise reasoning and well-being by Kunzmann & Baltes (2003) and Mickler & Staudinger (2008) which found inconclusive results (as cited in Grossman, et al., 2013). Grossman and colleagues suggest that in previous studies,

"abstract descriptions of personal problems" (Baltes & Staudinger (2000) and "briefly described scenarios provided little information about social context, which may be a critical factor in the assessment of wise reasoning" (Sternberg, 2004; Grossman et al., 2013, p. 945).

Grossmann and colleagues "built on the idea that people acquire wisdom through experience and through the successful mastery of various challenging life experiences" (Pasqual-Leone, 1990; Rowley & Slack, 2009; Sternberg, 1998; as cited in Grossman et al., 2013, p. 945). They conceptualized individuals gaining wisdom through the use "dynamic reasoning strategies" applied in a number of conflict situations; this included expanding on the previous work of Rowley (2006) and Sternberg (2007), who found that wisdom is more than "static knowledge about a particular conflict and situation," being instead a "social construct" (as cited in Grossman et al., 2013). Grossmann and colleagues measured six broad categories of wise reasoning from prior research (Baltes & Staudinger, 2000; Basseches, 1980; Kramer, 1983; Staudinger & Glück, 2011; as cited in Grossman et al., 2013). These included: (1) change, (2) compromise, (3) flexibility, (4) perspective, (5) resolution, and (6) limits of knowledge. The study results yielded several interesting findings that extended the research of Cartensen and colleagues, demonstrating "that as people age, they shift their priorities towards interpersonal issues and develop greater emotional competence (Charles & Cartensen, 2010; as cited in Grossman et al., 2013, p. 951). Furthermore, this study determined "that older adults show greater ability to reason wisely about social conflicts than younger and that among middle-aged and older adults such reasoning is positively linked to socioemotional benefits"; they also suggested that "wiser reasoning about social conflicts leads to greater-well-being and not vice versa" (Grossman et al., 2013, p. 951).

In another study, Igor Grossman, Mayumi Karasawa, Satoko Izumi, Jinkyung Na, Michael Varnum, Shinobu Kitayama, and Richard Nisbett (2012) studied aging and wisdom and the cultural differences in the way Japanese approach social conflict in comparison to Americans. Grossman and colleagues interviewed 411 adults aged 25 to 75, divided into three age groups. These researchers pointed out that cultural psychology research over the past 20 years indicates "cultures differ greatly in the way they approach conflict," with Japanese culture encouraging "interpersonal harmony and stability" (Grossman et al., 2012). In comparison, American culture stresses "personal

preferences and individuation in relationships, which may often prompt interpersonal conflicts (Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000; as cited in Grossman et al., 2012, p. 1060). These cultural differences are "well understood within the theoretical framework of independent versus interdependent social orientation" (Grossman et al., 2012, p. 1060). Grossmann et al., (2012), concluded the Japanese participants were culturally encouraged to maintain "interpersonal harmony" to avoid social conflicts, whereas Americans were more conflict prone in social situations. However, this study revealed that "older Americans reason more wisely about intergroup and interpersonal conflicts than their younger counterparts" (Ohbuchi & Takahashi, 1994; as cited in Grossman et al., 2012, p. 1064). Furthermore, based on "intergroup or interpersonal conflicts, younger and middle-aged Japanese on average gave wiser answers than did Americans. With respect to "intergroup or interpersonal conflicts, younger and middle-aged Japanese provided wiser responses than did the Americans . . . and [Americans] experience more conflicts than Japanese do" (Ohbuchi & Takahashi, 1994; as cited in Grossman et al., 2012, p. 1060).

As researchers have highlighted, even though there are similarities between intellectual and wisdom-related knowledge, they are opposite in many respects. The differences present wonderful opportunities for older adults to develop self-awareness through and openness in the last phase of their lives (Bianchi, 1994; Erikson, 1982; Erikson & Kivnick, 1986; Mason, 1974; McGann, 1996; Thomas, 1991, as cited in Ardelt, 2000). In addition, intellectual, wise reasoning and well-being across the lifespan can be achieved by all adults willing to shift their thinking towards developing "greater emotional competence," providing the opportunity to reason wisely in social conflicts with others. Wisdom and age: are older adults wiser than college students?

In 2010 Ardelt conducted a study with 533 participants, aged 20-89 years of age, using 3D-WS. This study explored whether individuals who had a desire to learn from their experiences would show increases in levels of wisdom (Ardelt, 2010).

Research results indicated that there was no difference in wisdom between college students and older adults (52-87 years old). This, Ardelt argues, "confirms earlier speculations that wisdom does not automatically increase with age" (Ardelt, 1997; Assmann, 1994; Baltes and Freund, 2003; Dittman-Kohli and Baltes, 1990; Jordon, 2005; Staudinger, 1999; Sternberg, 2003; Webster, 2003; as cited in Ardelt, 2010, p.

202). This is an interesting finding in that researchers and ordinary citizens in the past, have made the false assumption that with increased age, comes wisdom. However, researchers in the past 40 years have discovered mixed findings (Baltes, et al. 1995; Pasupathi and Staudinger, 2001; Takahashi and Overton, 2002; as cited in Ardelt, 2010). Furthermore, Ardelt found that older adults, without a college degree had better than expected scores on the reflective dimension of wisdom. This suggests that this dimension does not just access intellectual understanding; if this were the case, we would expect college students and older adults with a college degree to have an advantage here (Ardelt, 2004). "Older adults with and without a college degree," Ardelt argues, "might be at an advantage in this regard compared to college students, because they have the benefit of a lifetime of opportunities to reflect on these experiences" (Ardelt, 2010, p. 203-204).

This is an important study that adds to the existing empirical literature that has found that wisdom is not solely determined by an individual's age (Ardelt, 1997; Assman, 1994; Baltes and Freund, 2003; Dittman Kohli and Baltes, 1990; Jordon, 2005; Staudinger, 1999; Sternberg, 2005; Webster, 2003; as cited in Ardelt, 2010). Furthermore, this study confirms that an increase in wisdom is not the direct result of higher education. Extending the findings of Brugman (2006) and Sternberg (2005), Ardelt speculates that individuals with a college education may benefit in the development of wisdom by engaging in self-reflection, accepting uncertainty, and being open to learning from new experiences, characteristics shown to play a significant role in the development of wisdom (Ardelt, 2010).

4.3. Contemporary Views on Religion, Spirituality, and Wisdom

Many researchers studying wisdom have recognized the importance of a religious or spiritual practice in the development of wisdom by individuals and older adults. Several empirical studies have shown that individuals have relied on God and/or their spiritual beliefs in dealing with uncertain, stressful times in their lives (Achenbaum & Orwoll, 1991; Ardelt, 2008; Ardelt, et al., 2013; Choi & Landeros, 2011; Levenson et al., 2005; Yang, 2001).

This section will discuss the shift in the religious landscape since the 1970s, the latest trends, and how individuals currently view religious practices versus spiritual beliefs and practices (Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013). Many individuals have some type of spiritual practice, whether they are affiliated with a specific church or combine beliefs and practices from various traditions, including Christianity, Buddhism, Taoism, Hinduism, and Shamanism. This section will discuss the conceptual differences between religious versus spiritual belief systems, uncover what current literature reveals about the religious shift from Christianity to other spiritual beliefs, and consider how individuals incorporate these beliefs in their search for meaning in their lives.

In 2013, Paul Wink and Michele Dillon contributed to Ferrari and Weststrate's book *Religion, Spirituality, and Personal Wisdom*. The data for their research referenced the Institute of Human Development (IHD) Longitudinal Study, undertaken in the 1920s and consisting of two samples (the Berkeley Guidance and Oakland Growth studies). This study followed 319 participants as infants from childhood until late adulthood, which in the case of 184 participants was into their 70s (Wink & Dillon, 2013, p. 172–173, as cited in Ferrari & Weststrate, 2013; Dillon et al., 2003; Dillon & Wink, 2007; Block, 1971; Block, 1989; as cited in Wink, et al., 2007).

Wink and Dillon observed that since the 1970s, the religious landscape has changed in significant ways. By 2007, 16% of Americans were not affiliated with any religion, Protestants comprised 51% of the population and Catholics 24% (Pew Forum, 2008; Wink & Dillon, 2013, cited in Ferrari & Weststrate, 2013). These shifts in individual views and preferences reflect that country's changing religious and sociocultural landscape. As such, the historical preference for Christianity is declining, shifting to greater religious diversity, including an increase in spiritual beliefs and practices; "Buddhists (0.7%), Muslims (0.6%), Hindus (0.4%), New Age (0.4%), and Native American (0.3%) spiritual practices [are] increasingly becoming visible" (Pew Forum, 2008; Wink & Dillon, 2013, p. 166, as cited in Ferrari & Weststrate, 2013). Additionally, a significant percentage of Americans who are affiliated with churches identify as being both "religious and spiritual," often blending church participation with diverse non-traditional beliefs and practices (General Social Survey, 2008; Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013). Furthermore, as Altemeyer (1996) suggests, "religiosity plays a critical factor in the cultural polarization evident in ongoing political

debates about abortion, and same sex marriage and, more generally, in predicting authoritarian attitudes (Altemeyer, 1996; as cited in Wink et al., 2007).

4.3.1.   Central differences between spirituality and religiousness

Wink and Dillon suggest that the central difference between spiritual seekers and traditional or church-based religiousness is based on how each of these distinct practices provides personal meaning for individuals seeking direction in their lives (Dillon & Wink, 2007; Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013).

A 70-year longitudinal study conducted at the University of California, Berkeley revealed interesting findings regarding differences between spiritual and religious individuals (Clausen, 1993; Dillon & Wink, 2007; Eichorn, 1981; Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013).). Researchers Dillon & Wink (2007) compared the personality traits of religious versus spiritual individuals. Religious individuals were characterized as warm, protective, and ethically minded. They had traditional views on women and generally were less tolerant of individuals with different sexual preferences. Conservative views on authority are valued, along with the maintenance of existing views and traditions (Wink, Dillon, & Prettyman, 2007; Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013). In contrast, spiritual seekers were open-minded, independent thinkers who expressed creativity in their lives. Not surprisingly, they had "low scores on authoritarianism, thus indicating that they accepted nonconventional gender roles and sexual preferences . . . [and they] demonstrated independence from traditional social rules, and sources of authority" (Dillon & Wink, 2004; Wink & Dillon, 2013, p. 168, as cited in Ferrari & Weststrate, 2013). Additionally, spiritual seekers expressed an openness to incorporating views from many religious traditions, including Christianity, Buddhism, Taoism, Hinduism, and Shamanism (Aupers & Houtmann, 2006).

As scholars have noted, for individuals seeking deeper meaning in their lives, many of these traditions lead to a discovery of the "sacred self". Interestingly, whether this search takes place in a traditional religious setting or through personal exploration aimed at promoting individual growth and wisdom, seeking the sacred self adds value to the lives of individuals (Aupers & Houtmann, 2006; Wink and Dillon, 2013, as cited in Ferrari & Weststrate, 2013).

4.3.2.   Generativity of religious and highly spiritual individuals

The research findings Dillon and Wink (2013) used found that personal wisdom was demonstrated by both religious and highly spiritual individuals from their late 50s into late adulthood through acts of altruism. Although the altruistic focus for religious and spiritual individuals differed, both groups demonstrated concern for local and global issues (Dillon & Wink, 2004; Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013). This aligns with Erik H. Erikson's (1966) views on generativity. As middle adulthood approaches, individuals work to resolve conflict and ego-centered views (stagnation) and to focus greater concern on others (generativity) and society in general (Erikson, 1986, as cited in Kruger et al., 2015).

Wink and Dillon's exploration of the personal wisdom of religious individuals and spiritual seekers reveals the complexity of wisdom (2016). They suggested that traditional forms of church participation as well as spiritual seeking are important, finding a positive association between wisdom in both practices. The indication that personal wisdom is gained through traditional religiosity and spiritual practices suggests that both practices are relevant to individuals searching for meaning in their lives (Wink & Dillon, 2013, as cited in Ferrari & Weststrate, 2013).

4.3.3.   The role of religion for older adults and hospice patients

This section will highlight the role of religion in the lives of older adult hospice patients and healthy older adults by examining how religiosity influences subjective well-being and the acceptance of death. For the past 50 years, researchers have studied various aspects related to this topic. The focus in this section will be individuals' intrinsic and extrinsic views on religiosity, and their sense of meaning and purpose in life in relationship to their subjective-well-being.

In 2003, Monica Ardelt conducted a study with 103 older adults, examining the effect of intrinsic and extrinsic religious orientations on well-being. The results indicated that intrinsic religious orientation was positively related to older adults' sense of purpose (Ardelt, 2003). Additionally, intrinsic religious orientation combined with shared spiritual activities and religious participation resulted in increased meaning and purpose in life but was unrelated to subjective well-being (Ardelt, 2003). Interestingly, the study results

revealed that those with an extrinsic religious orientation exhibited a greater fear of dying than those with no religious faith, whereas individuals with an intrinsic religious orientation were more accepting of death (Ardelt, 2003). Ardelt speculated this was because intrinsic individuals had created meaning and community by frequently participating in shared activities with other like-minded religious individuals (Ardelt, 2003).

The topic of death and dying for many individuals can be unsettling on several levels. Researchers offer conflicting findings on the role that religion plays in the lives of older adults who are approaching death (Ardelt & Koenig, 2006). For instance, Ardelt and Koenig (2013) studied 103 relatively healthy older adults and 19 hospice patients (aged 61 or older). Their primary purpose was to examine whether intrinsic or extrinsic religiosity influenced an older adult's subjective well-being and acceptance of death (Ardelt & Koenig, 2006). The study results revealed that intrinsic religiosity has a strong positive effect on an individual's acceptance of death and an indirect positive effect on subjective well-being. Ardelt and Koenig referred to Allport and Ross (1967), who conceptualized distinct constructs for extrinsic and intrinsic religiosity. They distinguished each construct based on the role and importance that religion plays in an individual's life. For instance, an extrinsically religious person tends to view religion as a social and networking avenue, modified according to their self-interest and level of commitment (Allport & Ross, 1967, as cited in Ardelt & Koenig, 2006). In contrast, Donahue describes intrinsic religiosity as an opportunity for individuals to create meaningful experiences in their lives through their religious practice. In other words, although an intrinsic person has concerns and needs, they are comforted by their religious beliefs, because religious people have placed their faith in God or a higher power (Donahue, 1985, as cited in Ardelt & Koenig, 2006).

In addition, Ardelt & Koenig's (2006) study revealed that a sense of purpose in life was unrelated to a fear or acceptance of death. However, both healthy older adults and hospice patients with an intrinsic religious orientation found comfort in their belief in God and the afterlife (Ardelt & Koenig, 2006). Interestingly, for hospice patients, "extrinsic religiosity was negatively related to [an] acceptance of death" if not counterbalanced with intrinsic religiosity (Ardelt & Koenig, 2006, p. 209). But findings indicated that "intrinsic religiosity and frequency of prayer were significantly correlated with purpose in life" (Ardelt & Koenig, 2006). In the case of healthy older adults, a sense

of purpose in life was shown to decrease their anxiety about death, and in some instances, so was prayer (Ardelt & Koenig, 2006). However, prayer was shown to have the opposite effect for hospice patients. Researchers noted that "being a hospice patient might indeed increase a person's fear of death if it is not counterbalanced by hope or solace received through prayer or an existential sense of purpose in life" (Ardelt & Koenig, 2006, p. 208).

With respect to subjective well-being, the study results showed that purpose in life was influenced by subjective well-being more than religiosity. For hospice patients, their subjective well-being was significantly influenced by their physical health and terminal diagnoses, but participation in shared spiritual activities positively contributed to their acceptance of death (Ardelt & Koenig, 2006). In the case of healthy older adults, a sense of purpose in life was shown to decrease their anxiety about death, as was prayer in some instances (Ardelt & Koenig, 2006). In fact, Ardelt and Koenig (2006) highlighted several researchers who have noted the positive effects of religiousness in the lives of older adults in the last months of their life. Idler, Kasl, and Hays (2003), building on a previous longitudinal study with 2,812 older adults, revealed that older adults' religious beliefs provided strength and comfort as they approached the end of their lives (Idler, Kasl, and Hays, 2003, as cited in Ardelt & Koenig, 2006). Similarly, Berger (1969) suggested older adults towards end of their lives search for deeper meaning, and religion often is a way to understand the losses and challenges they are facing (Berger, 1969, as cited in Ardelt & Koenig, 2006). Wang and colleagues (2013) analyzed longitudinal data for 1,000 older adults aged 72 and over, comparing aging and religious participation, and found that a decline in religious attendance did not reflect a change in religious beliefs (Wang et al., 2013). Another study by Falkenhain and Handal (2003) revealed that in older adults, intrinsic religious views were strongly aligned with their beliefs about the afterlife (Falkenhain & Handal, 2003, as cited in Ardelt & Koenig, 2006).

The many research studies highlighted in this section provide a broad consensus that intrinsic religiosity and spiritual activities contribute to older adults' subjective well-being and acceptance of death as they approach the end of their lives. These factors are particularly important for older adults in hospice. Intrinsic religiosity, connection to a faith community, and spiritual activities have a positive influence on hospice patients (Ardelt & Koenig, 2006). Interestingly, the results indicated that "a sense of purpose in life rather than religiosity had a positive effect on subjective well-being" (Ardelt & Koenig, 2006, p.

184). Erikson, Erikson, and Kivnick (1986) asserted that "a sense of purpose and meaning in life is a powerful predictor for subjective well-being, fear of death and death avoidance in old age" (as cited in Ardelt, 2003, p. 72). This is a fascinating area of research on all individuals but particularly older adults. From many of the research studies and conceptual articles published over the past 50 years, it is evident that exploration concerning the development of wisdom is diverse, and the ancient quest for meaning in life will continue to intrigue researchers and individuals for many years to come.

4.4. Wisdom, Morality, and Ethics

This section will briefly highlight two ancient philosophies' views on morality, ethics, and their important role in society, as well as modern views concerning the differences between intelligence and wisdom—specifically, how ethical disengagement is evidenced in the behaviour of intelligent individuals whose unscrupulous behavior is anything but wise, thus creating adverse consequences for society in general.

First, Joel Kupperman's view of two different forms of knowledge sets the stage for understanding how various religions and cultures, including those of Artistotle and Confucians, have viewed knowledge and moral judgments in relationship to wisdom. Next, three of Robert Sternberg's theories will be briefly reviewed, followed by an overview of the characteristics and models of wise individuals.

Kupperman contributes to the discussion of wisdom in ethics and morality by suggesting that literature characterizes wisdom as knowledge about how individuals need to live their lives (Kupperman, 1990, as cited in Sternberg & Jordon, 2005). Kupperman refers to Ryle (1945–1946) distinguishing between "knowing how" and "knowing that" (Kupperman, 2005; Ryle, 1945–1946, as cited in Sternberg & Jordon, 2005). "Knowing that" describes a proficient understanding of facts and the ability to answer questions related to these facts (Kupperman, 2005, as cited in Sternberg & Jordon, 2005). Kupperman explains that "more complex forms include knowing how to sustain satisfying human relationships, and (even more broadly) knowing how to live" (Kupperman, 2005, p. 246, as cited in Sternberg & Jordon, 2005).

In virtually all Indian and Chinese philosophical interpretations of wisdom, "Zen Buddhism. . . especially ridicules people who think that wisdom can consist of intellectualized formulas" (Kupperman, 2005, p. 247, as cited in Sternberg & Jordon, 2005). Rather, wisdom as a form of "knowing how" to live is encouraged (Kupperman, 2005, as cited in Sternberg & Jordon, 2005). In both Asian and Western views, wisdom is achieved through the internal work that an individual does, often through self-reflection (Kupperman, 2005, as cited in Sternberg & Jordon, 2005).

Kupperman suggests that historically, ethics and morality have differed in their connotations, with some commentators believing that ethics is the study of morality whereas others suggest that morality provides the framework for how individuals should live (Kupperman, 2005, as cited in Sternberg & Jordon, 2005). Artistotle and the Confucians agree on the importance of moral judgments. Both perspectives suggest that individuals must utilize intelligence, experience, and reflective knowledge when making difficult moral decisions (Kupperman, 2005, as cited in Sternberg & Jordon, 2005).

The importance of this section on wisdom, morality, and ethics is that each is needed in society. As Kupperman (2005) suggested, the ways of knowing encompass more than just knowing the answers to specific questions; the more complex forms of knowing involve understanding and nurturing the relationships in our lives. As many wisdom researchers, philosophers, and others have highlighted, we need to broaden our views and capacity and adopt a global concern for all individuals, one that extends far beyond ourselves and our immediate circle of family and friends.

4.4.1. Intelligence, wisdom, and ethical disengagement in society

Robert J. Sternberg, a prominent wisdom researcher who has developed several theories over the years, in 2013 wrote a chapter titled "Personal Wisdom in the Balance" in Ferrari and Weststrate's book. In this chapter, Sternberg reflected on his 1997 theory of successful intelligence, which suggested that "in order to act intelligently, one needs creative skills to generate ideas, analytical skills to ascertain whether they are good ideas, and practical skills in order to apply the ideas and persuade other of their value" (Sternberg, 2013, p. 53, as cited in Ferrari & Weststrate, 2013). Interestingly, 16 years later, Sternberg was troubled by an apparent weakness in this theory. He was

astonished by the fact that leaders such as "Josef Stalin, Mao Tse Tung or Robert Mugabe . . . were ruthlessly creative . . . [and] analytical in implementing their ideas . . . [and] practical in the execution of their policies, resulting in the starvation, imprisonment, and death of millions" (Sternberg, 2013, p. 53, as cited in Ferrari & Weststrate, 2013).

Sternberg also highlighted the disconnect between intelligence and wisdom, and how the immoral actions of intelligent individuals suggest they are clearly not acting with wisdom. Sternberg refers to the financial scandals of the 1980s, highlighting Enron, WorldCom, Goldman Sachs, and Arthur Anderson, to name a few of the companies embroiled in massive corruption scandals masterminded by extremely educated and successful individuals. Sternberg further elaborated on the 2008 Wall Street disaster, when highly intelligent individuals created a worldwide financial crisis that led to the financial ruin of millions. Sternberg suggested that a common theme among the unscrupulous individuals involved in these massive financial scandals is that although they were considered highly intelligent, they demonstrated an enormous lack of wisdom (Sternberg, 2013, as cited in Ferrari & Weststrate, 2013).

4.4.2. Ethical disengagement: bridging the gap between thought and action

Sternberg highlighted the topic of ethical disengagement, suggesting that individuals justify disengaging from their actions by believing that ethical values apply to others while failing to see that the values also have relevance for them personally (Bandura, 1999; Sternberg, 2013, as cited in Ferrari & Weststrate, 2013). Additionally, Sternberg identified five fallacies that result in foolish or unwise behavior:

> These five fallacies include: (1.) Unrealistic optimism. The person thinks he or she is so bright, or so powerful, that anything he or she does will turn out all right, regardless of how foolish or unethical it may be. (2.) Egocentrism. The person comes to believe that his or her leadership or power is for purposes of self-aggrandizement. (3.) False omniscience. Some people come to believe themselves as all-knowing. (4.) False omnipotence. Napoleon's failed invasion of Russia stands as one of the great historical monuments to false feelings of power. (5). False invulnerability. (Sternberg, 2002, 2015a, 2005b, 2008, 2013, p. 69, as cited in Ferrari & Weststrate, 2013)

Sternberg refers to his WICS theory (wisdom, intelligence, creativity, and synthesis), in which wisdom is achieved when individuals combine these three

characteristics with ethical values in their interactions (Sternberg, 2003). Sternberg also developed the balance theory of wisdom, which "views wisdom as inherent in the interaction between an individual and a situational context, much as intelligence" (Sternberg, 1997a, as cited in Sternberg, 1998, p. 353; Valsiner & Leung, 1994). In this context, individuals demonstrate ethical values by seeking common ground, balancing intrapersonal and interpersonal interests, and showing concern for others (Sternberg, 2003, 2013, as cited in Ferrari & Weststrate, 2013). As Sternberg suggests, wisdom can be achieved in society by acting intelligently and using personal experience to identify and generate creative solutions for the common good of society (Sternberg, 2013).

Ironically, just six years after Sternberg wrote that chapter, the world is witnessing the current U.S. president, Donald Trump, who is the epitome of what Sternberg characterizes as "ethical disengagement . . . the dissociation of oneself from ethical values" (Sternberg, 2008, 2013, p. 69, as cited in Ferrari & Weststrate, 2013). The traits of ethical disengagement certainly describe Donald Trump, a leader whose tumultuous tenure is characterized by a disregard for ethics, rules, common decency, and the truth. According to the *Washington Post*, as of February 3, 2019, President Trump in 745 days had made 8,459 false or misleading claims (Kessler, Kelly, Rizzo, & Lee).

Sternberg concludes "Indeed, probably relatively few leaders at any level are particularly wise. Yet the few leaders so—perhaps Nelson Mandela, Martin Luther King, or Mohandas Ghandi, Winston Churchill, and Mother Teresa—leave an indelible mark on the people they lead and, potentially, on history" (Sternberg, 2013, p. 71, as cited in Ferrari & Weststrate, 2013). We are at a pivotal juncture in history with regards to the instability of the greatest nations, their leadership, and the urgency of stopping climate change. More than ever, we need leaders to act wisely and with concern for all human beings.

4.4.3.   Empirical studies of the multidimensional characteristics of a wise person

Csikszentmihalyi and Rathunde suggested that while modern conceptualizations of wisdom will evolve and individuals will continue to search for meaning, it is unlikely that wisdom will disappear (Csikszentmihalyi & Rathunde, 1990, as cited in Sternberg,

1990). They compare ancient wisdom and other ways of knowing to the empirical research of Holliday and Chandler (1986), Habermas (1972), Clayton and Birren (1980), and Sternberg (1985) in identifying the multidimensional characteristics of a wise person (Csikszentmihalyi & Rathunde, 1990, as cited in Sternberg, 1990).

These multidimensional qualities were described by Holliday and Chandler in 1986 as follows: "a general competence which overlaps with logical intelligence or technical ability, an experience based pragmatic knowledge, and reflective or evaluative metaanalytic skills" (Holliday & Chandler, 1986; Csikszentmihalyi & Rathunde, 1990, p. 30, as cited in Sternberg, 1990). According to Clayton and Birren (1980), wise individuals integrate three types of skills: of intellectual, affective, and reflective (Clayton & Birren, 1980; Csikszentmihalyi & Rathunde, 1990, as cited in Sternberg, 1990).

Holliday and Chandler's empirical research included a series of separate studies involving a total of 500 subjects. The research goal was to collect and analyze common descriptions of wise people and evaluate how these influenced the subjects' ability to solve problems (Holliday & Chandler, 1986, as cited in Sternberg, 1990). The first study, with 150 individuals of three cohorts (young adults, middle-aged adults, and senior citizens), generated lists of the characteristics of wise people. This study revealed there were no important age or cohort differences (Holliday & Chandler, 1986, as cited in Sternberg, 1990). The second study included a new subset of terms and themes from the psychological and philosophical literature. Participants were asked to rate the characteristics of wise people. The results from Holliday and Chandler's study revealed that participants of all ages had shared similar descriptions of and views on wise people and wisdom. The analyses of these prototype ratings produced converging evidence that wisdom needs to be considered as a "well-defined, multidimensional, prototypically organized competency descriptor" (Holliday & Chandler, 1986, p. 138, as cited in Sternberg, 1990). Five factors emerged from these data: exceptional understanding; judgement and communication skills; general competence; interpersonal skills; and social unobtrusiveness (Holliday & Chandler, 1986, as cited in Sternberg, 1990).

Holliday and Chandler contrasted their study results with the Berlin group's univariate account of wisdom, which focused on the pragmatics of intelligence. They noted that the responses from the participants in their studies "were not so easily contained within the horizon of possible meanings afforded by the conventional unitary

conceptions of empirical-analytical knowledge" (Holliday & Chandler, 1986, p. 138, as cited in Sternberg, 1990). Holliday and Chandler's "general competency" factor overlapped with common conceptualizations of intelligence and was comparable to the Berlin group's notion of intellectual "mechanics." The judgment and communication skills factor was comparable to the Berlin group's "expertise in the fundamental pragmatics of life." The exceptional understanding factor was characterized as "interpretive and meta-analytic abilities that allow wise persons to establish life goals and values rather than merely identify simple prudential choices" (Holliday & Chandler, 1986, p. 138, as cited in Sternberg, 1990). Holliday and Chandler suggested the study of wisdom thus far does not fully encompass its complexity (Holliday & Chandler, 1986).

Clayton and Birren's study of 83 individuals representing three age cohorts (between 21 and 70 years of age) examined how wisdom is perceived (Clayton & Birren, 1980). This study included descriptors of wise individuals from an earlier pilot study (Clayton, 1975b): "experienced, intuitive, introspective, pragmatic, understanding, gentle, empathetic, intelligent, peaceful, knowledgeable, sense of humor, and observant" (Clayton & Birren, 1980, p. 113, as cited in Baltes & Brim, 1980). This study concluded that wisdom is multidimensional, representing an integration of cognitive, affective, and reflective qualities. All age groups identified the reflective and affective components as important aspects of wisdom. Clayton & Birren noted these concepts are important in Eastern views of wisdom (Clayton & Birren, 1980, as cited in Baltes & Brim, 1980).

Clayton and Birren's study revealed an interesting finding that contradicted the belief that age brings wisdom (Clayton & Birren, 1980): these older participants did not view themselves as having more or less wisdom compared to middle-aged and young participants. Furthermore, younger adults and older adults had different conceptions of wisdom, with the older adults viewing understanding and empathy (affective qualities) as more aligned with wisdom than age or experience (Clayton & Birren, 1980). Clayton and Birren acknowledged the need to cultivate the attributes of wisdom throughout the lifespan. They concluded that "presently, our technological society encourages productivity rather than reflection and values problem-solving rather than perceiving the assets of a broad questioning approach" (Clayton & Birren, 1980, p. 131, as cited in Baltes & Brim, 1980).

Sternberg's (1985) balance theory of wisdom is still referenced by wisdom researchers. His three studies investigated individuals' conceptions of and beliefs about wisdom. Sternberg suggested, "implicit theoretical approaches to wisdom have in common the search for understanding of people's folk conceptions of what wisdom is…whether these beliefs are right or wrong" (Sternberg, 1998, p. 348).

Sternberg conducted three studies investigating implicit theories of wisdom. The goal was to understand individuals' use of intelligence, creativity, and wisdom. The first study (Sternberg, 1985b) "involved 200 professors in art, business, philosophy, and physics departments, and 30 adult laypersons, each asked to rate the characteristics of a wise, intelligent, or creative individual in their occupations" (Sternberg, 1998, p. 348). The correlations across all three ratings in each group except philosophy revealed "the highest correlation between wisdom and intelligence; in philosophy, the highest correlation was between intelligence and creativity" (Sternberg, 1985, as cited in Sternberg, 1998, p. 348).

In Sternberg's second study from 1985, "40 Yale college students sorted three sets of 40 behaviors based on similarity. The top 40 behaviors in each set were the top-rated wisdom, intelligence, and creativity behaviors from a previous pre-study" (Sternberg, 1998, p. 348). Two dozen professors of art, business, philosophy, and physics as well as laypersons were asked to identify what behaviours were characteristic of an ideally wise, intelligent, or creative person. Six components of wisdom emerged:

1. Reasoning ability: has the unique ability to view a problem or situation and solve it; has good problem-solving ability; a logical mind; the ability to distinguish between correct and incorrect answers; the ability to apply knowledge to solving problems; and reasons clearly.

2. Sagacity: displays concern for others; considers advice; understands how to work with a variety of people; is thoughtful and fair in dealings considering all sides.

3. Learns from ideas and environment: is perceptive and learns from mistakes.

4. Judgement: is sensible; has good judgment; thinks before acting; considers long-term view versus short-term outcomes.

5. Expeditious use of information: is experienced; seeks out information, has age, maturity that comes from experience; learns from past mistakes and successes.

6. Perspicacity: is intuitive; ability to offer solutions that are right and true; the ability to interpret and understand their environment.

(Sternberg, 1985b; 1998, p. 348)

In the third study (Sternberg, 1985b), 30 adults were asked to rate themselves on the behaviours and descriptions of intelligence, creativity, and wisdom. This study revealed that intelligence was highly correlated with cognitive intelligence, and wisdom was highly correlated with social intelligence (Sternberg, 1998).

Sternberg suggests these implicit studies reveal the differences between a wise person and an intelligent person. A wise person has a certain sagacity, which includes characteristics that differ from intelligence, such as considering and weighing advice from diverse viewpoints, making fair judgements and learning from mistakes (Sternberg, 1985). This is an important distinction because there are many intelligent individuals in society who often do not consider the consequences of their short-sighted decisions and short-term goals. History provides examples of wise leaders such as Nelson Mandela, Martin Luther King Jr., Mohandas Ghandi, Winston Churchill, and Mother Teresa, who weighed options carefully when making decisions (Sternberg, 2013, as cited in Ferrari & Weststrate, 2013).

4.4.4. Psychodevelopmental wisdom approaches

This section of this literature review will highlight various researchers and their understanding of the multidimensionality of wisdom. Gisela Labouvie-Vief suggested there is a consensus that wisdom refers to attributes encompassing more than intelligence, and that "the essence of wisdom" is to understand that "knowledge is fallible and to strive for balance between knowing and doubting" (Labouvie-Vief, 1990, p. 181, as cited in Sternberg, 1990). In addition, the concept of wisdom is associated with "moral and spiritual integrity, humility and compassion, or insight into the pragmatic, subjective, and psychological dimensions of life" (Labouvie-Vief, 1990, p. 52, as cited in Sternberg, 1990).

Karen Strom Kitchener and Helen G. Brenner draw upon Kitchener's reflective judgment model of adult cognitive development. They explore various aspects of individuals' knowledge and concepts of knowing (Kitchener & Brenner, 1990, as cited in

Sternberg, 1990). Kitchener and Brenner list four aspects of wisdom, citing other research closely related to the development of reflective judgement:

1. the presence of unavoidable difficult, problematic issues inherent in life (Dixon & Baltes, 1986; Keyes, 1983);

2. a comprehensive understanding characterized by both breadth and depth (Clayton & Birren, 1980; Dixon & Baltes, 1986; Holliday & Chandler, 1986);

3. a recognition that knowledge is uncertain and therefore [it] is not possible for truth to be absolute (Clayton & Birren, 1980; Holliday & Chandler, 1986; Meacham, 1982); and

4. a willingness and exceptional ability to develop sound, executable judgments in the face of uncertainty (Baltes, Smith, Staudinger, & Sowarka, 1990; Dixon & Baltes, 1986).

(Kitchener & Brenner, 1990, p. 213, as cited in Sternberg, 1990)

Arlin suggested additional features shared by problem finding and wisdom, including:

1. the search for complementarity; the detection of asymmetry in the face of that which appears symmetrical and in equilibrium;

2. openness to change, its probability and its reality;

3. a pushing of the limits, which sometimes leads to a redefinition of those limits;

4. a sense of taste for problems that are of fundamental importance; and

5. the preference for certain conceptual moves.

Arlin, 1990, p. 230; as cited in Sternberg, 1990

Several researchers have suggested that the development of wisdom involves the ability to be open to change, and a willingness to change our views and move in new directions even in the face of uncertainty (Bransford et al., 1986; Arlin, 1990, as cited in Sternberg, 1990).

John Meacham conceptualized wisdom in terms of one's knowledge that "one does not know, appreciating the fallibility of knowledge" (Meacham, 1990, p. 184; Sternberg, 1990). He suggested that knowledge is fallible, and wisdom must be

balanced between knowing and doubting. By balancing both knowledge and doubting, individuals can avoid extremes in their analyses of situations (Meacham, 1990, as cited in Sternberg, 1990). In the end, Meacham suggested that when acquiring knowledge, individuals must be open to uncertainties, doubts, and questions in their quest for wisdom (Meacham, 1990, as cited in Sternberg, 1990).

4.4.5. Psychosocial wisdom approaches and older adults

For the past 30 years, researchers have studied psychosocial wisdom in relation to older adults. In Erikson's psychosocial theory (1963), he postulates that "certain ego strengths or virtues" contribute to an individual's psychosocial development as the person successfully navigates through eight stages of development. Stemming from this, it has been suggested that wisdom emerges from psychosocial maturity, resulting in a life lived to the fullest (Erikson, 1963; as cited in Webster, 2003).

Deidre Kramer (1990) suggests that for Erikson, "the aging individual evaluates his or her life in order to provide meaning and continuity" (Erikson, 1968; Kramer, 1990, p. 286, as cited in Sternberg, 1990). Additionally, Kramer suggests that philosophical and theoretical views of wisdom are concerned with "questioning the meaning of life," which is essential in the pursuit of wisdom (Dittmann-Kohi & Baltes, 1990; Moody, 1983; Kramer, 1990, p. 286, as cited in Sternberg, 1990). Kramer also suggests that wisdom involves both spiritual development and intrapersonal development (Hodges, 1986, as cited in Kramer, 1990; Sternberg, 1990).

Wink and Staudinger (2016) conducted a study measuring wisdom and psychosocial functioning in older adults, and the interrelationship between wisdom-related performance, personality, and generativity. Their study revealed that participants who scored high in wisdom-related performance had qualities related to openness, insight, and understanding of others, and they valued well-being and purpose in life. Another important finding was that both personality growth and generativity were strongly linked to wisdom. Wink and Staudinger suggest that individuals' willingness to show concern for others is important for personality adjustment and growth. They also refer to Dillon and Wink (2007), who found that generativity is a characteristic shared by both religious and spiritual seekers (Dillon & Wink, 2007, as cited in Wink & Staudinger, 2016).

Ardelt et al.'s 2013 study of 144 older adults found that "psychosocial strengths of the aged, consisting of a combination of wisdom, mastery, and purpose in life, were significantly and positively related to subjective well-being" (p. 111). These findings suggest that older adults can continue to successfully age even when facing difficulties, and "that aging might well be the result of life-long psychosocial development and growth in wisdom to discover a deeper and more mature sense of life meaning, mastery, and spirituality" (Erikson, 1982; Erikson et al., 1986; Jung, 1971; Maslow, 1970, 1971, as cited in Ardelt et al., 2013, p. 113). Psychosocial strengths and spirituality are practices that many individuals strive to develop over the course of their lives. Researchers suggest both are beneficial as one ages, and that they become especially helpful towards the end of life (Fowler, 1981; Keyes, 1983; Wong, 2000, as cited in Ardelt et al., 2013). Importantly, "developing wisdom (Ardelt and Oh, 2010) and maintaining a sense of meaning and purpose in life (Wong, 1998) and control over one's environment (Shultz and Heckhausen, 1996) seems to be beneficial for both increasing subjective well-being and decreasing death fear at the later stage of life" (Ardelt et al., 2013, p. 113).

The wisdom researchers highlighted in this section show the value of psychosocial maturity for all individuals, and particularly older adults, when evaluating their lives. Developing openness, insight, and a willingness to show concern for others through acts of generativity benefit the individual, their society, and the world at large.

4.4.6.   A social ecological approach: difficult life events and wisdom development across the lifespan

In 2018, Heidi Igarashi, Michael Levenson and Carolyn Aldwin conducted a study of 50 participants aged 56 to 71 to examine how wisdom develops within the context of difficult life events (DLEs) and explore how social environments impact the development of wisdom. "[G]uided by ecological models of resilience that describe the dynamic transactions between individuals and their environments," they studied the role that adversity, self-knowledge, compassion, uncertainty, and acceptance of complexity contributed to the research subjects' perspectives and experiences (Aldwin & Igarashi, 2012; Ungar, 2011; as cited in Igarashi et al., 2018, p. 1350).

Difficult life events and wisdom development

As Igarashi and colleagues discuss, DLEs are believed to promote wisdom when difficult situations arise in individuals' lives and they are provided with the opportunity to re-evaluate their lives in the context of their social environments (Staudinger & Bowen, 2010). Researchers suggest that post-traumatic growth (PTG) is similar in nature (Tedeshi & Calhoun, 2004) ,as well as stress-related growth (SRG; Aldwin & Levenson, 2004; Park, Aldwin, Fenster, & Snyder, 2008; as cited in Igarashi et al., 2018), and that "individual characteristics, including traits, beliefs, motivations, and values, are also important in the development of wisdom within the context of DLEs" (as cited in Igarashi et al., 2018, p. 1351). Igarashi and colleagues posit that sociocultural influences play an important role and that "separating individuals from the sociocultural" and their worldviews can be a challenge (Miyamoto, Ma, & Petermann, 2014; as cited in Igarashi et al., 2018). As discussed, "a social ecological approach involves both the informal community and formal institutions, which both [*sic*] generate meaning" (Stokols, 2017; as cited in Igarashi et al., 2018, p. 1351).

This interesting study on DLEs contributes to existing literature on the development of wisdom. The synergies between DLEs and the research on PTG provide additional understanding about the individual benefits of self-reflection and working through difficult situations (Janoff-Bulman, 1992; Park, 2010; Tedeschi & Calhoun, 2004), and how this connects with wisdom (Glück & Bluck, 2011; Staudinger, 2011; Weststrate & Glück, 2017; as cited in in Igarashi et al., 2018). Additionally, DLEs create the opportunity for individuals to receive and experience life-changing support from others, generating "feelings of compassion, humility, and connection" in meaningful ways and a common understanding of suffering (Epstein, 2013; as cited in Igarashi et al., 2018.

Igarashi and colleagues (2018) identified four aspects of wisdom from this study. The first is the importance of "knowing oneself" (Curnow, 1999), and the second is "developing compassion" (Holliday & Chandler, 1986; Ardelt, 2011; Glück & Bluck, 2013; as cited in Igarashi et al., 2018). Two less pronounced components are "being uncomfortable with uncertainty" and "accepting complexity" (Baltes & Staudinger, 2000; Staudinger, 2011; as cited in Igarashi et al., 2018). A final interesting point these researchers made was that "individuals who became comfortable with uncertainty

actively valued a present-focused life. Those who learned to accept complexity understood the complicated reasons that might explain puzzling situations" (Igarashi et al., 2018, p. 1356).

Each of the various approaches above offer individuals the opportunity to develop wisdom throughout their lives. The psychodevelopmental wisdom approach, the psychosocial wisdom approach, and the social ecological wisdom approach have central themes involving self-reflection, compassion, and self-understanding in relationship to others as strong components in the development of wisdom. When individuals seek to form a deeper sense of their mature self, realizing their connection and responsibility to others, wisdom is possible for them to achieve.

4.4.7.   Empirical studies and wisdom subcomponents

In 2013, Katherine Bangen, Thomas Meeks, and Dilip Jeste conducted a literature review titled, "Defining and Assessing Wisdom." This extensive review investigated the various empirical definitions of wisdom and the most common overlapping wisdom subcomponents (Bangen et al., 2013).

Having reviewed approximately 80 empirical and conceptual wisdom articles, they made a strong, successful attempt to compile the commonly cited sub-components of wisdom. Bangen, Meeks, and Jeste combined the similar dimensions of wisdom into nine subcomponents (2013).

> The most commonly included subcomponents, which appeared in more than half of the definitions are (1) social decision making and pragmatic knowledge of life, which relates to social reasoning, ability to give good advice, life knowledge, and life skills; (2) prosocial attitudes and behaviors, which include empathy, compassion, warmth, altruism, and a sense of fairness; (3) reflection and self-understanding, which relates to introspection, insight, intuition, and self-knowledge and awareness; (4) acknowledgment of and coping effectively with uncertainty; and (5) emotional homeostasis, which relates to affect regulation and self-control. Finally, subcomponents included in fewer than half of the reviewed definitions include (1) value relativism and tolerance, which involves a nonjudgmental stance and acceptance of other value systems; (2) openness to new experience; (3) spirituality; and (4) sense of humor.
>
> (Bangen et al., 2013, p. 1256)

4.4.8. Pragmatic knowledge about fundamental life matters

Several wisdom researchers have conceived of it as expert knowledge about fundamental life matters: P. Baltes et al. (1984); Dittmann-Kohi & Baltes (1990); Smith & Baltes (1990); Staudinger & Baltes (1996a, 1996b); Baltes, Dittman-Kohli, & Dixon (1984); Baltes et al. (1992); Baltes & Staudinger (1993); Baltes & Staudinger (2000). Smith and Baltes defined the fundamental pragmatics of life as "knowledge about the life-span development of individuals, human nature and the conduct of social and intergenerational relationships, life tasks, goals and life's uncertainties" (Smith & Baltes, 1990, p. 494). Later, they developed "five criteria characterizing wisdom and wisdom-related performance," considering factual and procedural knowledge to be the basic criteria, with the three remaining criteria (life-span contextualism, value relativism, and the recognition and management of uncertainty) being more important aspects (Baltes & Smith, 1994). In other words, factual knowledge relates to human nature, the development of an individual over the course of their lifetime, interpersonal relations with others, and concern for oneself and others in society. Procedural knowledge refers to "meaning and conduct in life"; this involves providing advice to others, having life goals, and addressing conflict and uncertainty. Additionally, they considered life-span contextualism, meaning how an individual incorporates their past, present, and future into their views within the context of their life and many aspects of society (Baltes & Staudinger, 2000). Value relativism refers to one's values and goals in relation to those of others in society. Lastly, the recognition and management of uncertainty is based on the fact that individuals have limited knowledge, and the future is unknown (Baron, 1988; Dawes, 1988; Gigerenzer, 1996; Nisbett & Ross, 1980; Simon, 1983; Stich, 1990, as cited in Baltes & Staudinger, 2000). Interestingly, Baltes and Staudinger also considered spiritual beliefs and the "existence of a divine being" as being equally important for wisdom-related knowledge (Baltes & Staudinger, 2000).

From the perspective of the fundamental pragmatics of life, Baltes and colleagues have conducted many empirical studies to assess wisdom-related performance and wisdom-related knowledge, and they have contributed much to the psychological study of wisdom. Staudinger, Lopez, and Baltes (1997) measured wisdom-related performance in relationship to psychological functioning (intelligence, personality, and the personality–intelligence interface). Results revealed that wisdom-related performance cannot be measured by cognitive ability alone; instead, "wisdom-

related knowledge and judgement is more closely related to measures of personality and of the personality intelligence interface than to intelligence" (Staudinger et al., 1997, p. 1209).

In an interesting finding concerning personality and wisdom-related performance, "openness to experience and psychological mindedness emerged as the strongest predictors of wisdom-related performance" (Staudinger et al., 1997, p. 1210). These researchers incorporated into their model some aspects of Erikson's theory of personality development. The significance of the idea in relationship to this study shows "the strong predictive and positive relationship of psychological-mindedness and wisdom-related performance," with wise people demonstrating a desire to delve deeper within themselves (Staudinger et al., 1997). This study importantly reveals that wisdom in life requires more than intelligence; specifically, an openness to new experiences, combined with deep insight, are important aspects in the attainment of wisdom.

4.4.9.   Prosocial attitudes: empathy, compassion, and altruism

Researchers have identified prosocial attitudes and behaviours as important characteristics in the development of wisdom; these include empathy, compassion, warmth, altruism, and a sense of fairness (Bangen et al., 2013). Prosocial characteristics are important in society because they provide individuals with the opportunity to contribute to the better good in society and the world. Sternberg provided an example in which individuals were encouraged to show concern for others through understanding, seeking advice, and acting fairly in interactions with others (Sternberg, 1990). Yang (2001) referred to two previous studies of 296 Taiwanese Chinese adult participants aged 18–65 that examined the concepts of "competencies and knowledge, benevolence and compassion, openness and profundity, modesty and unobtrusiveness" (Yang, 1997, 2001). These studies revealed that each of these characteristics was valued and practiced in the lives of the Taiwanese Chinese adult participants.

4.4.10.   Self-reflection, insight, and wisdom

Many wisdom researchers acknowledge that reflection and self-understanding are integral to the development of wisdom (Glück & Bluck 2007, 2010; Staudinger &

Glück, 2011). Reflection is understood as a person's desire to search deeply into their life to develop insight, self-awareness, and intuition (Bangen et al., 2013). Several researchers have conducted autobiographical studies that utilize the power of reflection in reviewing critical life junctures. Studies examining the relationship between individuals' autobiographical narratives and interpretations revealed that the greatest personal growth was a result of going through and learning from life experiences (Bluck & Glück, 2004; Glück et al., 2005). In 2007, Webster measured five dimensions: openness, emotional regulation, humor, critical life experience, and reminiscence and reflectiveness. This study of 171 individuals aged 17–92 conceptualized reminiscence and reflectiveness as opportunities to learn from critical life experiences (Webster, 2007). Webster referenced other autobiographical studies (Gluck et al., 2005; Staudinger, 2001) and the success of these studies in highlighting reflection upon life situations and the emergence of wisdom (Gluck et al., 2005; Staudinger, 2001, as cited in Webster, 2007).

Since 2003, many of Ardelt's studies of wisdom and older adults have revealed the importance of integrating the affective, reflective, and cognitive dimensions of wisdom, using the Three-Dimensional Wisdom Scale (3D-WS). The reflective dimension of wisdom is characterized by self-examination, self-awareness, self-insight, and the ability to view life from many different perspectives (Ardelt, 2003).

4.4.11.   Uncertainty and the development of wisdom

Wisdom researchers agree that another important aspect in the development of wisdom is uncertainty (Bangen et al., 2013). Le's empirical study provided examples of how stressful situations in individuals' lives create the opportunity to develop a greater tolerance for uncertainty (Le, 2008). Baltes and Staudinger suggested that wisdom-related knowledge and judgement provide an individual with the ability to handle uncertainty in life (Baltes & Staudinger, 2000). Often, uncertain and challenging times provide an opportunity to delve deeper to understand a lesson, and these are often the times when wisdom develops.

4.4.12.   **Wisdom and emotional homeostasis**

Researchers studying wisdom have emphasized emotional homeostasis—which relates to "affect regulation and self-control"—as an important aspect of wisdom (Bangen et al., 2013). In other words, "affect regulation or emotional regulation is the ability of an individual to modulate their emotional state to adaptively meet the needs of the environment" (Whalley, 2019). Sternberg also addressed this in his balance theory of wisdom when he described wisdom ad an individual's ability to utilize knowledge and values for the common good (Sternberg, 1998). There is great worth in considering one's actions in relationship to the rest of society, and the impact of these actions and decisions more broadly, in some cases even globally.

The literature on lifespan development suggests that individuals experience psychosocial growth and development throughout their lives (Erikson, 1982; Erikson et al, 1964; Maslow, 1970, 1971, as cited in Ardelt & Edwards, 2015). Wisdom researchers agree, even though a consensus has not been reached on the definition of wisdom (Staudinger & Glück, 2011). Pioneering research began in the late 1970s and early 1980s, and research has steadily increased, with much progress in the conceptualization, measurement, and empirical research of wisdom (Webster et al., 2014). In "Expert Consensus on Characteristics of Wisdom: A Delphi Method Study," Jeste et al. (2010) revealed a "remarkable consensus" on the concepts of wisdom, intelligence, and spirituality. Recently, Bangen et al.'s 2013 review of the empirical definitions of wisdom and wisdom's subcomponents, as highlighted in this section, has contributed to additional appreciation for the richness possible in the study of wisdom.

Chapter 5.

Contrasting Personal & General Wisdom

This chapter will discuss various researchers' views on personal and general wisdom. As defined by Mickler and Staudinger (2008), personal wisdom encompasses insights an individual has learned from dealing with issues in their lives, whereas general wisdom denotes a person's insights on life in general. Researchers and lay people believe that life experience contributes to the development of wisdom (Bluck & Glück, 2005). Some researchers suggest that wisdom research would benefit from distinguishing between personal and general wisdom (Mickler & Staudinger, 2008; Staudinger, 1999b; Staudinger et al., 2005, as cited in Sternberg & Jordon, 2005; Staudinger & Glück, 2011).

Staudinger and colleagues suggest that general wisdom and personal wisdom stem from different research traditions (Staudinger et al., 2005, as cited in Sternberg & Jordon, 2005). Personal wisdom approaches are often associated with research on personality and its development and view wisdom as the development of the mature personality (e.g., Ardelt, 2000, 2003; Erikson, 1959; Helson & Wink, 1987; Helson & Srivastava, 2001; Labouvie-Vief et al., 1989; Loevinger, 1998; Orwoll & Perlmutter, 1990; Webster, 2003; Staudinger & Mickler, 2005, pp. 192–193, as cited in Sternberg & Jordon, 2005). Some researchers who study clinical, personality, and developmental psychology believe that personal wisdom is the result of individual growth. They suggest that through "socioemotional changes and challenges," individuals can learn from their experiences. In this way, personal growth is similar to the concepts of "maturity" and "personal growth" (Staudinger & Glück, 2011).

The empirical study of general wisdom from researchers following the Neo-Piagetian tradition of cognitive development and the expertise perspective, which included the Berlin paradigm and Sternberg's balance theory (Staudinger et al., 2005, as cited in Sternberg & Jordon, 2005). General wisdom associated with the expertise perspective is the Berlin approach (e.g., Baltes, 1993; Baltes et al.,1992; Mickler & Staudinger, 2008; Staudinger & Baltes, 1994; Sternberg, 1998; (Staudinger & Mickler, 2005, p. 192; as cited in Sternberg & Jordon, 2005).

The Neo-Piagetian tradition of cognitive development and postformal cognitive development was expanded on by psychological wisdom researchers, including Arlin (1990), Kitchener and Brenner, (1990), Kramer (1986), Labouvie-Vief (1990), Pascual-Leone (1990), and Riegel, (1975); as cited in Staudinger & Glück, 2011. As Staudinger and Glück (2011) suggest, "the main issue in postformal cognition is the realization that universal truths, as required for formal logic, can seldom be identified in the more complex problems that humans face" (p. 224). Often, interpersonal conflicts present "multiple truths, incompatible goals, contradictions, and high levels of uncertainty" (p. 224). Researchers suggest postformal thinking includes viewing causes and solutions from many different perspectives, tolerating ambiguity, accepting paradoxes, uncertainty, and contradictions, and being open to compromise (Staudinger et al., 2005, as cited in Sternberg & Jordon, 2005).

Mickler and Staudinger suggest that personal wisdom is based on "judgment and advice" regarding difficult and challenging circumstances that arise in an individual's life (Staudinger, 1999b; Staudinger, et al., 2005, as cited in Mickler & Staudinger, 2008). An example of applying general wisdom would be providing suggestions to a friend who approaches you for advice because their marriage is in trouble. Personal wisdom would be applied if an individual whose marriage was in trouble engaged in soul searching and contemplated whether to file for divorce (Mickler & Staudinger, 2008).

Staudinger, Dörmer, and Mickler (2005) suggest that research traditions examining personal and general wisdom are equally important: "personal wisdom approaches consider wisdom as a personality characteristic or pattern of personality characteristics (e.g., Erikson, 1959), whereas most of the general wisdom approaches view wisdom as a theoretical concept that may crystallize on the individual but also on the societal level (e.g., Staudinger & Baltes, 1994)" (Staudinger et al., 2005, p. 192–193, as cited in Sternberg & Jordon, 2005). In other words, personal wisdom provides the individual with the opportunity to work through the stages of growth throughout adulthood to develop insight, and general wisdom implies knowledge concerning practical issues in life.

The general wisdom approach encompasses the Berlin Wisdom Paradigm, "…a performance-based measure that conceptualizes general wisdom as expert judgment in in the area of fundamental pragmatics of life (e.g., Baltes, Smith, & Staudinger, 1992)

and measures it as wisdom-related performance (WRP; Staudinger, Smith, & Baltes, 1994)" as cited in Wink & Staudinger, 2016, p. 306. In other words, "the fundamental pragmatics of life refer to deep knowledge and sound judgment about the essence of the human condition and ways and means of planning, managing, and understanding a good life" (Staudinger et al., 2005, p. 197, as cited in Sternberg & Jordon, 2005). Since the early 1990s, Baltes and colleagues have conducted many influential psychological wisdom studies, focused on understanding participants' responses to hypothetical life dilemmas, and how they engage in life planning. These studies provide a rich variety of empirically based general wisdom knowledge concerning important aspects of life (Baltes et al., 1995; Baltes & Smith, 1990).

Several studies recognize that self-reflection concerning critical life events is central to the development of personal wisdom. In 2008, Mickler and Staudinger recognizing a need to expand on former performance measures of wisdom in which study participants "focused on wisdom as judgment and advice with regard to difficult and uncertain life problems as they apply to a generalized other (cf. Baltes, Smith, Staudinger, 1992, Sternberg, 1998)" as cited in Mickler & Staudinger, 2008, p. 787. Mickler & Staudinger recognizing that both personal and general wisdom are related they measured these independently and tested personal wisdom and examined age differences (Mickler & Staudinger, 2008). This study of 161 participants, aged 20–40 and 60–80, was based on the Berlin wisdom paradigm (Mickler & Staudinger, 2008). The study measured self-reflection and life events, revealing that "personal life events did not contribute to the prediction of general wisdom performance, but they played an important role for personal wisdom" (Mickler & Staudinger, 2008, p. 796).

A 2016 study by Paul Wink and Ursula Staudinger investigated wisdom-related performance (WRP) in relationship to personality and generativity later life, in 162 participants aged 68–77 years of age. Interestingly, results of this study revealed that wisdom-related performance (WRP) was positively associated with personality characteristics of personality growth. In fact, individuals who scored high on (WRP) were defined as having qualities associated with openness, purpose in life, insight, autonomy, and concern for others. Additionally, as a result of personal growth they were able to experience personal well-being and meaning in life. A wise individual search for personal wisdom is found through maturity and personal growth as well as sincere concern for others in the case of wisdom and generativity (Wink & Staudinger, 2016).

These findings contribute to the study of wisdom by attempting to distinguish personal and general wisdom. These researchers provided empirical support and the relationship between personal wisdom, personality maturity, life events and wisdom-related performance and generativity (Mickler & Staudinger, 2005; Wink & Staudinger, 2016). Interestingly, several researchers believe that general wisdom often is achieved before personal wisdom and that personal wisdom requires a willingness to seek engage in reflection, openness to experience personal growth and wisdom (Mickler & Staudinger, 2008; Glück & Bluck, 2007; as cited in Staudinger & Glück, 2011). Lastly, for the past 60 years, researchers have studied generativity and wisdom. They suggest that generativity relates to extending concern beyond oneself and family to consider the needs to society, humanity and future generations, as a result we have the opportunity to experience growth and wisdom (Erikson, 1950; Orwoll & Perlmutter, 1990; Sternberg, 1998; as cited in Wink & Staudinger, 2016).

5.1. Wisdom Research Approaches, Measurements, Scales and Models

Researchers have been studying wisdom for the past four decades (Bangen et al., 2013). During this time, the research focus has involved a combination of theoretical, speculative, and empirical studies involving individual's concepts of wisdom, resulting in specific areas of study within the disciplines of psychology and sociology (Baltes, et al., 1995). This section will discuss some of recent models and scales developed to measure personal wisdom. These models are distinct and measure unique aspects of personal wisdom and the characteristics which contribute to the development of wisdom.

5.1.1.   Adult Self-Transcendence Inventory Scale

Levenson, Jennings, Aldwin, and Shiraishi (2005) developed the Adult Self-Transcendence Inventory Scale, an 18-item scale to measure wisdom postulated to be achieved through self-transcendence. Levenson and colleagues drew from "Curnow's (1999) philosophical analysis of four central features of wisdom (self-knowledge, detachment, integration, self-transcendence" and Tornstam's (1994) concept of "geotranscendence" (Levenson et al., 2005; as cited in Webster, 2018, p. 301). Levenson and colleagues identified two factors—self-transcendence and alienation—

that were negatively correlated and found that "extraversion, openness to experience, agreeableness, and conscientiousness were positively related to self-transcendence while neuroticism and alienation were negatively related" (Levenson et al., 2005, p. 138).

5.1.2.   Brief Wisdom Screening Scale (BWSS)

Glück et al. (2013) employed "a purely empirical approach" to develop the Brief Wisdom Screening Scale (BWSS) using an "empirical compilation of 20 items from three self-report scales": SAWS (Webster 2003), ASTI (Levenson et al., 2005), and 3D-WS (Ardelt, 1997, 2003; as cited in Webster, 2018; Glück et al., 2013). Glück and colleagues investigated 47 wisdom nominees and 123 control participants. "[B]ased on a content analysis, three types of wisdom were identified: personal wisdom, general wisdom, and other-related wisdom" (Glück et al., 2013, p. 10). For this study, participants completed self-report measures that were then analyzed based on ASTI, SAWS, and 3D-WS. The researchers noted: "the BWSS had good reliability and unsurprisingly showed significant correlations with other validation measures (e.g. wisdom nominations, self-efficacy, openness) and appears to have promising psychometric properties" (as cited in Webster, 2018, p. 308).

5.1.3.   Ryff Inventory Scale

Carol Ryff and Corey Keyes developed a theoretical model of psychological well-being (Ryff & Keyes, 1995). This model features 6 distinct areas: Self-acceptance, Environmental mastery, Purpose in life, Positive relations with others, Personal growth, and Autonomy (Ryff & Keyes, 1995). Ryff & Keyes studied 1,108 adults to test this model of well-being. The results revealed that of the 6 theoretical constructs or areas, the only two areas of self-acceptance and environmental mastery were highly correlated but varied based on different age groups. Interestingly, concerning environmental mastery and positive relations than younger age groups. In addition, women scored higher than men on positive relations with others (Ryff & Keyes, 1995). The authors concluded that the concept of psychological well-being is complex, and they suggested that future studies of psychological well-being could investigate how people view their lives in terms of realizing their goals and having a sense of purpose and direction (Ryff & Keyes, 1995).

5.1.4.   The Three-Dimensional Wisdom Scale (3D-WS)

Monica Ardelt developed the Three-Dimensional Wisdom Scale (3D-WS), which measures the cognitive, reflective, and affective components of wisdom (Ardelt, 2003). The scale is based on previous work by Clayton and Birren (1980). Ardelt's definitions of cognitive, reflective, and affective qualities are as follows (2003, p. 279):

1. The cognitive dimension of wisdom "refers to a person's ability to understand life, that is to comprehend the significance and deeper meaning of phenomena and events, particularly with regard to interpersonal and interpersonal matters" (Ardelt, 2000b; Blanchard, Fields, & Norris 1995; Chandler & Holliday, 1990; Kekes, 1983; Sternberg, 1990a, as cited in Ardelt, 2003, p. 278).

2. The affective dimension reflects the "positive emotions and behavior an individual demonstrates toward other beings, such as feelings and acts of sympathy and compassion, and the absence of indifferent or negative emotions and behavior towards others" (Ardelt, 2003, p. 279).

3. "The reflective dimension is a prerequisite for the development of the cognitive dimension of wisdom. A deeper understanding of life is only possible if one can perceive reality as it is without any major distractions . . . by looking at phenomena and events from many perspectives to develop self-awareness and self-insight."

The results of Ardelt's 2003 empirical assessment of the 3D-WS indicated that "the 3D-WS can be considered a reliable and valid instrument" to measure wisdom in older adult populations (Ardelt, 2003, p. 275). Since 2003, Ardelt has used the 3D-WS to study a variety of ageing- and wisdom-related topics; she has developed a solid reputation and contributed much to the study of wisdom and older adults.

5.1.5.   Self-Assessed Wisdom Scale (SAWS)

In 2003, Jeffrey Dean Webster developed the Self-Assessed Wisdom Scale (SAWS), building upon a renewed interest in the study of wisdom by cognitive and developmental psychologists. The primary research up until the 1990s had been focused more on the conceptual and theoretical aspects of wisdom rather than empirical measurement, until the empirical research by Baltes and colleagues (e.g., Baltes & Smith, 1990; Baltes & Staudinger, 1993; Staudinger & Baltes, 1996, as cited in Webster, 2003). Based on these insights into the multidimensional nature of wisdom, Webster

identified the need to develop a new scale to measure wisdom. He determined five interrelated components that are important dimensions of wisdom: experience; emotional regulation; reminiscence and reflectiveness; openness; and humour (Webster, 2003).

Webster conducted a series of studies using SAWS. The first involved 266 participants aged 18–74 who answered a 30-item questionnaire that used a six-point Likert-type scale. The second study had 89 participants aged 18–88 and was based on each individual's implicit theories of wisdom. In the third study, he sought to demonstrate the validity of SAWS by measuring generativity and ego integrity in 85 participants aged 22–78, building on the theories of Erikson (1963), Baltes and Staudinger (2000), and Sternberg (1998). Based on these studies' results, Webster found SAWS to be "a highly reliable scale" for measuring these aspects of wisdom and for demonstrating a significant relationship between generativity and ego integrity (Webster, 2003).

In 2007, Webster carried out an expanded version of the previous studies. He measured 171 additional participants ranging in age from 17 to 92, who completed a 40-item version of the SAWS, the Loyola Generativity Scale, and the Experiences in Close Relationships Scale (Webster, 2003a, 2007). Results from this study replicated the findings from Webster's 2003 study, supporting the multidimensional nature of wisdom and its five components (Webster, 2003a). Webster now identified these five components as "emotional regulation, critical life experiences, openness, humor, and reminiscence/reflection" (Webster, 2007, p. 175).

Interestingly, three new significant concepts emerged from the 2007 study: attachment anxiety, attachment avoidance, and generativity (Webster, 2007). Each is important because its highlights characteristics of wise people. For instance, generativity is a quality that wise individuals demonstrate to others in the form of mentorship, knowledge sharing, and concern for others (Webster, 2003a, 2007). Webster's study found that wise individuals were "low in attachment avoidance," meaning they felt comfortable developing meaningful relationships. This study also revealed that "wise persons were not significantly lower on attachment anxiety"—in other words, they realized that there are always risks in developing and maintaining relationships with others (Webster, 2007).

Another interesting finding of Webster's studies was that "age is not positively correlated with wisdom"; previous studies had come to the same conclusion (Webster, 2003a; Ardelt, 1997; Baltes & Staudinger, 2000; Staudinger, 1999, as cited in Webster, 2007). Webster suggests that the development of wisdom is more than just "growing older"; wisdom is gained and deepened through critical life events (Webster, 2007).

Webster views critical life experiences as important aspects of wisdom. He suggests that individuals gain wisdom through turmoil, challenges, and uncertainties. These studies provided empirical support for the SAWS and high reliability for measuring wisdom (Webster. 2007). For researchers interested studying openness, emotional regulation, humor, critical life experiences, reminiscence and reflectiveness in conjunction with generativity and ego integrity, SAWS is an proven measurement tool to utilize.

5.1.6.   Situated Wise Reasoning Scale (SWIS)

Justin Brienza, Franki Kung, Henri Santos, D. Ramona Bobocal, and Igor Grossman (2018) developed the Situated Wise Reasoning Scale (SWIS). This scale is based on a 21-item, five-factor model: other's perspective; change/multiple outcomes; intellectual humility; search for compromise/resolution; outsider's vantage point (Brienza, 2013; Brienza et al., 2017).

This large-scale psychometric investigation (with 4,463 participants) revealing the new "Situated Wise Reasoning Scale (SWIS) is reliable and appears independent of psychological biases (attribution bias, bias blindspot, self-deception, and impression management)" in comparison to global wisdom reports (Brienza et al., 2018, p. 1093) and global self-report questionnaires used by established wisdom researchers (Ardelt, 2003; Glück et al., 2013; Levenson et al., 2005 and Webster, 2003; as cited in Brienza et al., 2018). Brienza and colleagues note that some of the drawbacks of previous studies include "relying on participants' global de-contextualized self-evaluations, [so] existing reports of wisdom do not reveal information about how people navigate certain challenges in their lives, thereby providing no insight into how wisdom may vary as a function of the situation" (Brienza et al., 2018, p. 1096).

In creating this new scale to assess wisdom, Brienza and colleagues, incorporated recent developments in "psychology and survey methodology" (Schwarz et al., 2009; Brienza et al., 2018). To address the inadequacy of "global self-assessed measures" that produce "memory-related biases, and biases concerning blind spot (Pronin et al., 2002) and social desirability (Paulhus, 1988)," and that require expensive narrative techniques, the SWIS was developed (as cited in Brienza et al., 2018, p. 1117). Brienza and colleagues, introduced a new hybrid method with this large-scale study and determined that the SWIS provides accurate responses "either unrelated or negatively related to research biases, compared to global wisdom reports" (Brienza et al., 2018). Importantly, this new hybrid method provides researchers with the ability to "establish the connection between wisdom-related cognition and balancing of interests" in relationship to wise reasoning, showing that individuals find a balanced approach, setting aside their individual goals and instead consciously considering others in conflict situations (Brienza et al., 2018). Additionally, this "hybrid method of state-level wise reasoning" integrates these insights by demonstrating that people respond to various levels of wise reasoning, depending on the seriousness of a particular situation (Grossman, 2017; Santos, Huyan, & Grossman, 2017; as cited in Brienza et al., 2018, p. 1118). They note that although "the concept of balance appears to be a central outcome in several theories on wisdom (e.g., Baltes & Smith, 2008; Grossman, 2017; Staudinger & Glück, 2011; Sternberg, 1998) the link remains theoretical, with little empirical scholarship testing the relationship of characteristics attributed to wisdom against indices of balancing one's interests and inferences about the world" (Brienza et al., 2018, p. 1117).

The development of the SWIS expands on researchers' ability to further investigate wise reasoning utilizing a hybrid approach, because as philosophers and psychological scientists acknowledge, "general knowledge or intelligence is insufficient for wisdom" (Ardelt, 2004; Baltes & Kunzmann, 2004; Baltes & Smith, 2008; Baltes & Staudinger, 2000; Jeste et al., 2010; Keyes, 1983; McKee & Barber, 1999; Sternberg, 1998; Vervaeke & Ferraro, 2013; as cited in Brienza et al., 2018). Brienza and colleagues seek to expand the excellent work and understanding contained in the "cognition work" of Clayton (1975, 1983), the "balancing various interests" of Sternberg (1998), the "notion of managing uncertainties" (Baltes & Smith, 2008), the "multidimensional wisdom theory" of Ardelt (1997), and the "person-context interaction in

expression" (Grossman, 2017; as cited in Brienza et al., 2018). The SWIS offers researchers the "empirical support for the notion of balance" as a key measure in several established wisdom theories (e.g., Grossman, 2017; Staudinger & Glück, 2011; Sternberg, 1998; as cited in in Brienza et al., 2018). Additionally, this new hybrid scale enables additional testing of the "process-oriented aspects of wisdom" (Grossman, 2017; Staudinger & Glück) as well as "providing an efficient platform for evaluating the role of contextual factors in understanding how wisdom-related qualities manifest and develop" (Brienza et al., 2018, p. 1119). Interestingly understanding "separate trait-and state-level effects of wise reasoning" provides the opportunity for researchers to further understand the interactions between wisdom, wise-reasoning, and prosocial characteristics to further expand the study and measurement of wisdom.

5.1.7. The Foundational Value Scale (FVS)

Leonard Jason, Arne Reichler, Caroline King, Derryk Madsen, Jennifer Camacho, and Wendy Marchese (2001) developed a scale containing 38 items with five-factor analysis. Their Foundational Value Scale (FVS) has five components: harmony, warmth, intelligence, nature, and spiritual. The researchers determined that the FVS had "adequate internal reliability and test-retest reliability," with dimensions "slightly related to several other constructs (e.g., stress and depression)" (Jason et al., 2001, p. 586). Certain researchers have cited instability in "subsequent studies using the original 23-item, five factor structure of the FVS" (Perry et al., 2002; DiGangi, Jason, Mendoza, Miller, and Contreras; 2013; as cited in Webster, 2018).

5.1.8. The Reminiscence Functions Scale (RFS)

Jeffrey Dean Webster developed the Reminiscence Functions Scale (RFS) after extensive pilot testing on a large sample (N = 710) of diverse adults aged 17 to 91 (Webster, 1993, 1997). The RFS is a "forty-three item, seven factor solution spanning a diverse and relatively comprehensive domain of reminiscence functions. The factors were labeled: Boredom Reduction, Death Preparation, Identity/Problem-Solving, Conversation, Intimacy Maintenance, Bitterness Revival, and Teach/Inform" (Webster, 1997, p. 138). The RFS is a "reliable, valid, and relatively comprehensive measure of reminiscence uses in adulthood" (Webster, 1997, p. 147). Other researchers "report very

good to excellent consistency for each of the eight subscales" (e.g., Cappeliez &
O'Rourke, 2006; Cappeliez, O' Rourke, & Chaudhury, 2006; Webster, 2002; Webster &
Gould, 2007; as cited in Cappeliez & Robitaille, 2010; p. 810).

5.1.9.   The San Diego Wisdom Scale (SD-WISE)

Michael Thomas, Katherine Bangen, Barton Palmer, Averria Sirkin Martin, Julia
Avanzno, Colin Depp, Danielle Glorioso, Rebecca Daly, and Dilip Jeste (2017)
developed the San Diego Wisdom Scale (SD-WISE). These researchers involved 524
community-dwelling adults aged 25 to 104 for this study. The research goal for the
development of this new scale was to "build upon recent gains in the understanding of
psychological and neurobiological models of the trait" and understand the relationship
between wisdom, well-being, and mental health (Thomas et al., 2017). Thomas and
colleagues measured: general knowledge of life/social decision-making; emotional
regulation; pro-social behavior; insight; value relativism; and decisiveness. Importantly,
the researchers suggested that "by examining the neurobiology of consistently identified
components of wisdom, one can begin to hypothesize how such complex human
characteristic may be orchestrated within the human brain" (Meeks & Jeste, 2009; as
cited in Thomas et al., 2017, p. 41). Additional research findings reviewed by Meeks and
Jeste (2009) revealed that the "prefrontal cortex and amygdala" are related to the areas
of the brain associated with wisdom (e.g., emotional regulation, social decision making,
value relativism and prosocial attitudes/behaviours; as cited in Thomas et al., 2017).
The researchers determined that SD-WISE correlated moderately strongly with both
SAWS and the 3D-WS-12. Additionally, a weak correlation was identified for happiness,
satisfaction with life, and personal mastery. A moderate correlation was identified for
resilience and well-being (Webster, 2018). Other researchers who evaluated SD-WISE
were surprised by the "very weak, non-significant negative correlation with measures of
anxiety and depression. This finding seems inconsistent with both general and
theoretical suppositions and empirical findings regarding the findings regarding the
association of wisdom and mental health (e.g., Webster et al., 2014) and needs further
investigation" (as cited in Webster, 2018, p. 309).

5.1.10.   The Wisdom Development Scale

Jeffrey Greene and Scott Brown developed the Wisdom Development Scale in 2006, building on Brown's (2004b) model. They asserted that although many models of wisdom exist, few have been adequately tested and measured (Greene & Brown, 2009). Their Wisdom Development Model, which is survey based, comprises six interrelated factors or dimensions: self-knowledge, understanding of others, judgement, life knowledge, life skills, and willingness to learn. In a 2009 study, they incorporated Brown's (2004a, 2004b) Wisdom Development Model and the associated Wisdom Development Scale (WDS; Brown & Greene, 2006; Green & Brown, 2009), aiming to assess their construct validity, measurement invariance, criterion validity, and score reliability. They assessed over 3,000 participants from two separate groups— professionals and college students—and found that the WDS was an "acceptable data-model fit" for measuring each individual group and combining the two groups (Greene & Brown, 2009). Green and Brown claim the model's six dimensions have similarities to more established concepts of wisdom but are more expansive. They also are critical of well-established researchers, stating that "numerous measures of wisdom have been advanced, but unfortunately they have had low levels of reliability (Ardelt, 1997) and questionable content validity (Baltes & Smith, 1990), or have not been tested with large enough sample sizes to adequately test the construct validity of their scores (Webster, 2003, 2007)" (Green & Brown, 2009, p. 290).

MODELS, MEASURES & WISDOM PARADIGMS

5.1.11.   The Berlin Wisdom Paradigm (BWP)

The Berlin Wisdom Paradigm (BWP) was developed by Paul Baltes and colleagues, including Ursula M. Staudinger, Jacqui Smith, and Ute Kunzmann, at the Max Planck Institute for Human Development, in Berlin (Baltes & Smith, 1990; Baltes & Staudinger, 2000; as cited in Glück, 2017, p. 1394). This performance measure of wisdom-related knowledge conceived of wisdom as "expert knowledge about fundamental life matters," meeting five criteria: "rich factual and procedural knowledge, life span contextualism, relativism, and the management of uncertainty" (Smith & Baltes, 1990, p. 494, Staudinger & Baltes, 2000; Glück, 2017).

5.1.12.   The Bremen Wisdom Paradigm (BrWP)

The Bremen wisdom paradigm expanded on previous research work (Mickler & Staudinger, 2008; Staudinger, Dörmer & Mickler, 2005; Staudinger & Glück, 2011) by seeking to differentiate the measurement criteria for general wisdom and personal wisdom. In 2008, Mickler and Staudinger developed a performance measure of personal wisdom, the Bremen wisdom paradigm (BrWP), similar in nature to the Berlin Wisdom Paradigm (Mickler & Staudinger, 2008; as cited in Glück, 2017).

5.1.13.   The MORE Life Experience Model

Judith Glück and Susan Bluck proposed the MORE Life Experience Model which suggests individuals have the opportunity develop wisdom through personal growth and life experiences (Glück & Bluck, 2007, 2010). By utilizing the MORE Life Experience model (mastery, openness, reflection and empathy/emotional regulation) individuals can begin to understand how all experiences in life contribute to their experience and overcoming obstacles and uncertainty (Staudinger & Glück, 2011). Glück & Bluck developed the MORE Life Experience Model based on two previous studies Bluck & Glück, 2004; Glück, Bluck, Baron, & McAdams, 2005). These were important studies in that they investigated participant's autobiographical narratives as well various accounts of life experiences, both positive and negative life experiences (Bluck & Glück, 2004; as cited in Glück et al., 2005). The core elements of this model consist of four general resources that individuals experience: "how they perceive and appraise them, how they deal with challenges, and integrate and reintegrate these experiences into their life story" (Glück & Bluck, 2013, p. 75; as cited in Ferrari & Weststrate, 2013). Ardelt and Webster's scales share many of these similar characteristics.

5.1.14.   Grossmann's Situational Measures of Wise Reasoning

In 2016, Igor Grossmann, Tanja M. Gerlach, and Jaap J. A. Denissen explored how individuals use wise reasoning during challenging times, by measuring (1) "intellectual humility, self-transcendence, and consideration of others' perspectives and compromise," as well as (2) "intraindividual variability in wise reasoning (WR)" in various life contexts (Grossmann et al., 2016, p. 611). They conducted a study with 152 adult participants who filled out daily diaries online. This study was innovative in approach,

unlike previous wisdom-related testing in "hypothetical in-lab situations" (Grossman & Kross, 2014; Kross & Grossmann, 2012; Kunzmann & Baltes, 2003; Staudinger & Baltes, 1996) or using "single-shot trait self-assessments of personal attributes (Ardelt, 2003; Webster, 2007)" (cited in Grossman et al., 2017, p. 617). This study contributes to the wisdom research by using a daily diary approach to test "the intraindividual variability in WR, with wiser reasoning in social versus non-social contexts" (Grossman, et al., 2017, p. 617). Additionally, the researchers found greater "state- compared to trait-level" associations, which they took to mean that individuals who were focused on "bigger picture, more complex, emotional representation [showed] less reactivity to adverse events, adaptive emotional regulation, and greater forgiveness" (Grossman et al., 2017, p. 617).

5.1.15. Ontogenetic model of wisdom

Staudinger & Baltes, 1994, found empirical support between wisdom and personality growth. "As predicted by the ontogenetic model of wisdom (Staudinger & Baltes, 1994), performance based measures of general wisdom are positively related to ego development, openness to experiences, psychological mindedness, a sense of well-being…and personal growth" (Mickler & Staudinger, 2008; Staudinger et al., 1997; as cited in Wink & Staudinger, 2016, p. 307).

Chapter 6.

Discussion

6.1. Critical Summary of the Evidence

This literature review synthesizes existing literature on older adults and the nature of wisdom in later life. The essence of this review is an attempt to link ancient concepts of wisdom with modern views and empirical studies of wisdom and older adults, while emphasizing the relevance and importance of and need for wisdom today.

A key strength of this literature review is an attempt to incorporate many perspectives on wisdom in relationship to older adults. It covers the characteristics of wisdom, in conjunction with empirical findings highlighting the nature and role of wisdom in later life. A second key strength is the wide overview of chapter topics and empirical research detailing the multidimensionality of wisdom in the study of older adults and wisdom. A third key strength is that it highlights the parallels between current global leaders' lack of wisdom and their dismissive attitudes concerning climate change, and the extent to which the wisdom of older adults is often dismissed in society due to the rapid pace of technological changes.

This review highlights the past 60 years of wisdom studies by lifespan psychologists. The study of wisdom is attributed to one of the first psychologists, G. Stanley Hall (1922), who conducted groundbreaking work on senescence and wisdom (Staudinger & Glück, 2011). Many other psychologists and sociologists have made strong contributions to the study of wisdom, which continues to be a fascinating area of study for psychologists, sociologists, philosophers, and religious scholars (Baltes & Staudinger, 2000).

Since the 1970s, steady progress has been made in the conceptualization, measurement, and empirical study of wisdom. These strides have enhanced the multidimensionality of Western research in this area. For example, wisdom has been defined as:

- Expert knowledge in the meaning and conduct of life (Baltes & Smith, 1990)

- Knowledge to achieve a common good by balancing personal, interpersonal, and social interests (Sternberg, 1998)

- The art of questioning (Arlin, 1990)

- The balance between knowing and doubting (Meacham, 1990)

- The balance between emotion and detachment, action and inaction, knowledge and doubt in dealing with life's vicissitudes (Birren & Fisher, 1990)

- The integration of cognitive, reflective, and affective/compassionate personality qualities (Ardelt, 1997; Clayton & Birren, 1980)

(from Ardelt & Oh, 2016, as cited in Bengtson & Settersten, 2016)

This review has explored several research topics, including: the relationship between aging and wisdom; the differences between intelligence and wisdom-related knowledge in older adults; how religiousness and spirituality affect older adults in the final stages of life; and whether life satisfaction contributes to wisdom in older adults.

Research views concerning wisdom and aging are complex and diverse. Ardelt's (2010) research confirmed earlier findings that wisdom does not automatically increase with age. This review also confirms that an increase in wisdom is not the direct result of higher education. Extending the findings of Brugman (2006) and Sternberg (2005), Ardelt (2010) speculates that individuals with a college education may find that it helps them develop wisdom by encouraging engagement in self-reflection, the acceptance of uncertainty, and an openness to learning from new experiences—characteristics shown to play a significant role in the development of wisdom. As Jordon (2005) asserts, several empirical studies consistently show that there is no direct relationship between wisdom and age. In fact, wisdom is a quality found in both young and older adults (Baltes et al., 1995; Smith & Baltes, 1990; Smith et al., 1994; Staudinger et al., 1992; Jordon, 2005, as cited in Sternberg & Jordon, 2005). Similarly, several other researchers have found that other factors—such as openness, self-reflection, uncertainty, dealing with critical life events, and other integrative dimensions of wisdom—contribute in more significant ways to the development of wisdom (Ardelt, 1997; Baltes & Staudinger, 2000; Staudinger, 1999; Webster, 2003a, as cited in Webster, 2007). Many researchers have concluded that multiple factors beyond age contribute to the development of wisdom.

As this review indicates, many researchers have theorized about and studied the differences between intellectual and wisdom-related knowledge in older adults. Their findings suggest that "while intellectual and wisdom-related knowledge share certain characteristics, such as answers to difficult life problems and a quest for truth, they are the complete opposite of each other in many areas" (Ardelt, 2000, p. 773). Ardelt (2000) also states that intellectual knowledge provides older adults with the opportunity to engage in the world, whereas wisdom-related knowledge prepares them for the "physical and social decline" associated with aging. Researchers acknowledge that older adults continue to learn, although studies have shown that as individuals age, fluid intelligence declines (Baltes, 1993; Baltes & Staudinger, 1993; Glendening, 1995; Moody, 1986; Shuldiner, 1992; Willis, 1985, as cited in Ardelt, 2000). In general, intellectual knowledge is based on a "scientific, theoretical, abstract, and detached approach" and an impersonal view of life (Strijbos, 1995, as cited in Ardelt, 2000). In comparison, wisdom-related knowledge arises from an individual's spiritual search for "meaning and purpose in life" and the answers to life's key questions (Blanchard-Fields & Norris, 1995; Clayton & Birren, 1980, as cited in Ardelt, 2000). Wisdom-related knowledge is achieved through "personal life experiences, self-reflection, self-awareness, and the transcendence of one's subjectivity and projections" (Ardelt, 2000, p. 783). These qualities, along with determination and an openness to experiences, all contribute to the acquisition of wisdom (Jarvis, 1992; Keyes, 1983; Kramer, 1990, as cited in Ardelt, 2000).

Additionally, many researchers consider the value of incorporating the affective, cognitive, and reflective dimensions of wisdom (Ardelt, 1997, 2000, 2003, 2005, 2008; Blanchard-Fields & Norris, 1995; Chandler & Holliday, 1990; Glück & Bluck, 2011; Kramer, 2000). Some include the cognitive and reflective elements, but often the affective dimension is not acknowledged (Ardelt, 2003). This affective dimension includes "positive emotions and behaviors toward other beings, such as feelings and acts of sympathy" (Ardelt, 2000, p. 279). The cognitive and affective dimensions are preceded by the reflective dimension (Ardelt, 2003). Although the reflective dimension is considered the crucial component, all three need to work simultaneously for a person to develop wisdom (Ardelt, 2000a; Clayton & Birren, 1980, as cited in Ardelt, 2003).

This review also highlighted the role of spirituality and religion in the lives of older adults. Many researchers studying wisdom have recognized the importance of a religious or spiritual practice in the development of wisdom. Several empirical studies

have shown that some individuals rely on God and/or their spiritual beliefs to deal with uncertain, stressful times (Dillon & Wink, 2004, 2007, as cited in Ferrari & Weststrate, 2006).

Research studies related to wisdom and subjective well-being (Ardelt & Edwards, 2016) have found that after controlling for demographics and advantages in life conditions (better subjective health, greater social involvement, less economic pressure, and being male), three-dimensional wisdom relates positively to subjective well-being. The Ardelt (2016) study determined that wisdom is beneficial for older adults' physical, psychological, and subjective well-being. The results of a study by Ardelt and Koenig (2006) showed that purpose in life was influenced by subjective well-being more than by religiosity. For hospice patients, their subjective well-being was significantly influenced by their physical health and terminal diagnosis. However, participation in shared spiritual activities contributed in a positive way to their acceptance of death (Ardelt & Koenig, 2006).

Many wisdom researchers highlight the benefits of prosocial activities for enriching the lives of older adults. Researchers have identified prosocial attitudes and behaviours as important characteristics in the development of wisdom; these include empathy, compassion, warmth, altruism, and a sense of fairness (Bangen et al., 2013). Prosocial characteristics are important because they provide individuals with the opportunity to contribute to the greater good in society and the world.

6.2. Future Research Directions

The topic of wisdom and older adults is extensive. This literature review has attempted to provide a broad overview, but the scope of all that has been accomplished in terms of research from the past 60 years is enormous. Many wisdom researchers have noted that although much progress has been made since the 1970s, a "consistent definition of wisdom" does not currently exist (Bangen et al., 2013; Jeste et al., 2010; Webster et al., 2014). This lack of consensus has contributed to inconsistent empirical measurements within the field, resulting in a variety of scales and methods for the measurement of wisdom (Jeste et al., 2010). The positive news is that in their Delphi method study, Jeste et al. found "a remarkable consensus among . . . 57 international

wisdom experts" on the concepts of wisdom, intelligence, and spirituality (Jeste et al., 2010, p. 668).

Another area within wisdom research that might be improved relates to expanding the breadth of research studies. With the exception of two California longitudinal studies and a New Haven longitudinal study, the majority looking at wisdom and older adults have been cross-sectional in nature. Several wisdom researchers have utilized the 70-year Berkeley Guidance and Oakland Growth studies, originating from the Institute of Human Development at the University of California, Berkeley in the 1920s (Block, 1971; Block, 1989; Eichorn, 1981, as cited in Wink, et al., 2007). Another was the 50-year Mills College Longitudinal Study, begun in Oakland, California in 1958. Clearly, we need more longitudinal studies on the development of wisdom. Additionally, the study of wisdom and older adults would be enriched in many respects if more longitudinal studies were conducted.

As just noted, the majority of wisdom research studies are cross-sectional, and wisdom researchers often mention this as a limitation. The numbers of participants in the cross-sectional studies ranged from less than 50 to over 500. Many researchers stated that the cross-sectional nature of their study made it impossible to empirically determine exact causality. Bangen et al. (2013) suggest that wisdom researchers should use a combination of "self-report and performance-based measures" in the future.

In her review of measurements and approaches, Judith Glück (2017) suggests that content validity determines "how well items or problems in a measure represent the respective content domain" that are important in constructing both self-report measures and performance measures (p. 1397). Several researchers have discussed the importance of content validity in the initial "construction of a measure," which in their view "is often underestimated" (Koller, Levenson, & Glück, 2017; as cited in Glück, 2017, p. 1397). In the past, the approaches have varied, with Ardelt (2003) using "definitions of her three wisdom dimensions" and other researchers (Levenson et al., 2005; Webster, 2003) using "factor analysis to confirm the expected structure" (as cited in Glück, 2017, p. 1397).

Webster's (2019) review of "self-report wisdom measures" highlights current aspects of self-report measurements that researchers utilize to study the elusive concept

of wisdom. Webster addresses content validity, questioning "whether a component is an integral feature, or only a correlate of wisdom" (Webster, 2019, p. 299). As Webster illustrates, "Glück and Bluck (2013) consider openness to experience as a correlate of wisdom whereas Webster (2003, 2007) sees it as a necessary, but not sufficient, feature," which future research will continue to explore, thereby contributing to the rich study of wisdom (Webster, 2019, p. 299). Another interesting issue Webster (2019) discusses is "discriminant validity," asking whether self-report measures "capture unique features of this construct or are they measuring some other important attribute?" (p. 299).

Another topic of discussion raised by Judith Glück (2017) concerns "convergent and divergent validity" with respect to the "relationship with other variables"—meaning are correlations with wisdom influenced by the various methodological approaches? Furthermore, Glück (2017) asserts that many correlations make sense: "wisdom is positively related to intelligence, openness to experience, well-being, and aspects of self-maturity . . . [and] these relationships are again influenced by method variance" (1398). For example, "self-report scales have higher correlations with other self-report scales, whereas performance measures have higher correlations with open-ended measures" (Glück, 2017, p. 1398).

The topic of "ecological validity" concerns whether a research setting is comparable to the real-world situation that the research study is measuring (Glück, 2017). This is an important point to consider, particularly "in measuring wisdom because wisdom manifests itself most clearly in specific, rare situations" (Glück, 2017, p. 1399). As Glück suggests, individual differences exist between wise and unwise individuals concerning how wisdom is evidenced by their responses to various unsettling and challenging situations that people face in their lives. Often, one's reactions to hypothetical scenarios are different than how one responds when personally affected by a situation (Glück & Bluck, 2014; as cited in Glück, 2017). Frequently, "neither thinking about a difficult life problem[,] as in typical performance measures[,] nor describing one's own typical behavior in a self-report scale may optimally predict a person's behavior in a wisdom-requiring real-life situation" (Glück, 2017, p. 1399).

In terms of self-report as a valid measure, Webster (2019) highlights that critics (Jeste et al., 2010; Staudinger & Glück, 2011) argue self-report wisdom measures "are

susceptible to biases such as self-enhancement and, paradoxically, accurate self-awareness" (Webster, 2019, p. 300). However, even though self-report measures are often compared with performance measures—viewed as the "gold standard" for assessing wisdom—"very few studies explicitly test such assumptions and when they do, self-report measures do quite well in comparison" (Webster, 2019, p. 315). Webster refers to Glück et al. (2013), who compared the Berlin Wisdom Paradigm (BWP) with ASTI, SAWS, and 3D-WS, with results revealing "all of the self-report measures showed better performance on some psychometric results" (Glück et al., 2013; Webster, 2019, p. 315). The reality is that the study of wisdom has advanced since the 1970s, with psychologists, sociologists, and others continuing to make great strides in their understanding of the concept of wisdom.

Future directions to advance the exploration and study of the development of wisdom in our society include building on social ecological concepts (Igarashi et al., 2018). Social ecological issues relate to social problems such as poverty, environmental injustice, racial prejudice, and social and economic inequality (Stokols, 2017). The development of wisdom can be further explored through the study of social ecological approaches facilitated by "interacting with individuals who are different than oneself," which has been shown to enhance the development of wisdom and self-transcendence and to increase prosocial behavior (Haidt, 2003; Stellar et al., 2017; as cited in Igarashi, et al., 2018). Additionally, issues of race, equity, and inclusion are important. "Activists are more attuned than ever to the intersectionality of the challenges facing communities and the nation, including inequality, racism, wage stagnation, criminal justice, immigration, environmental sustainability, and food access" (Blackwell, 2018, p. 64). Whether here in Canada or in other areas of the world, we need to support organizations dedicated to improving social equity and innovative approaches for changing policy and communities. One excellent example is PolicyLink in Oakland, CA (http://www.policylink.org/).

6.3. Conclusion

Wisdom has influenced religious, philosophical, political, aspects of societies for thousands of years. Many wisdom researchers have contributed to the study of wisdom and older adults over the last 60 years, providing a wide range of valuable empirical and conceptual knowledge. A prominent theme is the value of an integrative approach to

studying wisdom. One method prevalent in many studies considers how the cognitive, affective, and reflective dimensions of individuals influence their development of wisdom. Many researchers have stressed the importance of self-reflection, asserting that wisdom-related knowledge is gained through challenging life experiences, which create the opportunity for growth and self-awareness. Some have provided empirical evidence showing that concern for society and the world at large benefits everyone. Generativity has been empirically linked to wisdom, along with personality adjustment and personality growth (Wink & Staudinger, 2016). As researchers Takahashi (2000), Takahashi and Overton (2002), and Bangen et al. (2013) stress the need for a conscious effort to include participants from different cultures. In this review, my intent has been to provide broad and inclusive perspectives from several cultures.

We are at a pivotal moment in history. For humanity to survive, it is crucial that individuals and world leaders develop wisdom and be guided by it in their actions. Across the globe there has been a rise in extreme right-wing religious and political views and ideologies, threatening the foundations of democracy. A resurgence of fascism and major authoritarian governments around the world, coupled with the growing threats of nuclear war and climate change, underscore that the time for wisdom in our societies and world is now.

Potential recommendations to expand wisdom in our world include hosting intergenerational "wisdom forums" with leaders, including indigenous elders, from all over the world. Intentionally setting aside religious and political ideology, and instead shifting towards progressive forward-thinking perspectives with a focus on "the meaning and significance of Wisdom," is essential. Next, building on this collective focus, wisdom must be viewed from a social justice perspective. Everyone on this planet needs to deeply consider and change their individual actions and purchases regarding food, clothing, transportation, and consumption habits. Everyone needs to deeply consider and work towards fundamental change to drastically improve the working, living, and environmental conditions that many workers endure to support the lifestyles of middle-class and upper-class individuals.

In terms of the climate emergency and the existential crisis that the world currently faces, we need to hold all world leaders of countries and corporations accountable. We need to politically support world leaders who are transparent and

committed to equitable and significant, timely, sustainable solutions that will result in fundamental positive change for all. The question becomes, will the technological advances of the past 200 years serve humanity or contribute to our demise? At this point in our history, silence is complicity, and our individual actions have significant consequences for the planet and for our survival as a species.

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