2
Wisdom: its development and influence

"The fool doth think he is wise, but the wise man knows himself to be a fool."
-William Shakespeare

2.1. Introduction

The quest for wisdom has been going on for a long time in human history. However, the definition of wisdom itself evolved throughout this historical phase. Initially, the study of wisdom was part of philosophy and religion. Until recently, empirical studies on wisdom started in Psychology. In the last chapter, it was mentioned that wisdom could be applied in the negotiation. This chapter presents the development of wisdom studies and its related development. The section will start with how wisdom was developed in the empirical psychology literature. A few popular models of wisdom and themes are explained, and finally, the influence of wisdom on a few applied fields of psychology is discussed.

2.2. Development of wisdom studies

a) The initial era of growth in psychological sciences (before the 1990s)

In Psychology, G. Stanley Hall (1922) was the first psychologist to use the word Wisdom (Staudinger & Gluck, 2011). Afterward, Erickson used it as the highest form of virtue in his Theory of Psychosocial development. The theory of Psychosocial Development has greatly influenced the theorization of human development. However, in the last few decades, society has changed tremendously, which has made resolving life issues difficult, resulting in the unavailability of a wise person in this generation (Clayton, 1975). Since then, wisdom has been empirically examined from multiple perspectives, including development stage, virtue, and process.

Throughout the development of wisdom, many models were proposed. However, there is no consensus on the model that all wisdom researchers accept. A few models which have received major support from researchers are discussed below.

b) Models on wisdom

i. Berlin wisdom model

Many models have been proposed for wisdom. One of the earliest examples is the Berlin Wisdom Paradigm (BWP), which Baltes and colleagues developed. It was the first extensively empirically studied model of wisdom.

> "An expert knowledge system in the domain, fundamental life pragmatics (e.g., life planning, life management, life review)" (Baltes & Smith, 1990, p. 87).

It has five components: rich factual knowledge, rich procedural knowledge, lifespan contextualism, relativism, and the ability to understand and manage uncertainty. They see wisdom as a utopian quality that is very rare and that only a few can achieve (Baltes & Smith, 2008). Empirical validation of BWP has led to different findings associated with wisdom. With the increase in age, wisdom also develops. Although age is not the only factor, it has to be combined with other social, psychological, professional, and historical factors (Baltes & Smith, 2008); however, intelligence is not a predictor of wisdom. Instead, psychosocial characteristics and life history factors (openness to experience, generativity, cognitive style, contact with excellent mentors, and some exposure to structured and critical life experiences) have high predictive value (Baltes & Smith, 2008). Wisdom can also be evident in nonverbal and social behavior (Baltes & Smith, 2008). However, this model is criticized for being cognitively inclined (Ardelt, 2004a; Ardelt, 2004b).

ii. Balance theory of wisdom

A balance theory of wisdom was proposed by Robert J. Sternberg (1998). He defines it as:

> "the application of tacit knowledge as mediated by values toward the achievement of a common good through a balance among multiple (a) intrapersonal, (b) interpersonal, and (c) extrapersonal interests in order to achieve a balance among (a) adaptation to existing environments, (b) shaping of existing environments, and (c) selection of new environments." (Sternberg 1998:347)

He describes wisdom as a practical intelligence that can be used to resolve a real-life complex problem, which benefits oneself and creates a common good for society and the environment. One cannot learn wisdom from formal education, but it can be learned through experience and role models. It requires an understanding of cognitive, emotional, and motivational factors. Decisions based on wisdom are to harmonize personal, interpersonal, and environmental interests, which aims for a common good that benefits the entire society and not only looks for oneself (Sternberg R. J., 1998). However, this model was criticized for being too vague rather than a comprehensive construct (Trowbridge, 2001).

iii. Three-dimensional theory of wisdom

Monika Ardelt (2003) gave the three-dimensional theory of wisdom. Based on the work of Clayton and Birren (1980), Ardelt proposed three dimensions of wisdom: cognitive, reflective, and affective (Ardelt, Empirical Assessment of a Three-Dimensional Wisdom Scale, 2003). After the Berlin Wisdom Paradigm, this is another extensively studied model.

The three-dimensional theory of wisdom is significantly associated with the positive impacts of wisdom in old age, while no such association was found with childhood quality and mature personality traits (Ardelt, 2004a). Older adults with higher wisdom scores were able to grow psychologically through economic hardships like the Great Depression (Ardelt, 1998; Ardelt, 2004a)

The 3D-Wisdom Scale (3D-WS) was developed to measure wisdom through cognitive, reflective, and affective dimensions. It was validated with older adults and found to be reliable and stable over time. High wisdom scores correlated with well-being, mastery, life purpose, and subjective health and were inversely related to depressive symptoms and economic pressures. Wisdom was independent of demographics and social desirability (Ardelt, 2004a).

The limitation of this model states that the validation of this model is established against the older population (Ardelt, 2003). It only focuses on the personality factors and excludes situational and environmental factors (Ardelt, 2003). Also, it does not consider other variables such as ethical judgments, spirituality, humor, humility, and so on (Ardelt, 2003).

iv. MORE Life Experience Model

The MORE Life Experience Model, developed by Judith Glück and Susan Bluck (2013), posits that wisdom arises from a combination of life experiences and the personal resources individuals bring to these experiences. The acronym MORE stands for **Mastery, Openness, Reflective thinking, and Emotional regulation,** which are the key components that contribute to the development of wisdom (Glück & Bluck, 2013).

The model also assumes that life challenges help people develop wisdom by applying psychological resources such as mastery, openness, reflectivity, emotion regulation, and empathy (Weststrate & Glück, 2017).

v. Common Wisdom Model

As seen with the models listed above, there was a lot of confusion about what constitutes wisdom. Thus, in 2019, many wisdom researchers came together to form a wisdom task force and proposed the Common Wisdom Model. The Common Wisdom Model postulates wisdom includes morally grounded excellence in socio-cognitive processing. Moral grounding means the balance of self and other-oriented interest, the pursuit of truth, and orientation towards a shared humanity. Excellence in socio-cognitive processing includes applying a certain form of perspectival meta-cognition nature (PMC), which includes contextual adaptability, perspectivism, dialectical and reflective thinking, and epistemic humility while reasoning and problem-solving (Grossmann, et al., 2020).

Though it is the most recently proposed model, it is still not far from criticism. Again, it does not include the emotional aspect of humans (Glück, 2020). In fact, much of the wisdom-related insights come from negative life experiences, which are highly emotional in nature (see. Sharma & Sharma, 2021; Glück, 2020). Thus, it is receiving the same criticism as the Berlin Wisdom Model for emphasizing more cognitive aspects and ignoring emotional aspects.

Though there is not much consensus on wisdom's components in psychological inquiry, certain prominent themes repeatedly occurred in the research on wisdom. Next, these popular themes in the wisdom literature are presented.

c) Themes of wisdom research

i. Emotions

Emotion is a human factor that has been demonstrated to affect wisdom. Emotion is always a part of wisdom theories, either as a part of the theory or as a criticism for not being part of it. Ardelt's (2004) three-dimensional theory of wisdom and MORE theory of wisdom by Bluck and Gluck (2013) include emotion as a component. In contrast, Baltes's theory of wisdom and the Common Wisdom Model do not include emotions. Ardelt (2004) criticized the Berlin Wisdom Paradigm as a cold cognition. Baltes (2004) defends it by reasoning that his model is not cold cognition but contextualism, a component of the Berlin Wisdom Paradigm that needs specific interaction of social, emotional, motivational and cognitive factors to form higher forms of mental representation (Baltes & Kunzmann, 2004).

Moreover, many empirical associations have been found between wisdom and emotion. An association between emotional well-being and wisdom in older adults has been achieved through improved levels of perceived control, life involvement, and problem-focused and positive reappraisal coping strategies (Etezadi & Pushkar, 2013). Grossmann (2016) found wise reasoning to be associated with positive emotion and lower emotional reactivity. However, wisdom is not found to be related to positive emotions only. Hu et al. (2018) found their participants performed more wisely when they were sad. Also, when participants reported more emotional diversity, they were more likely to reason wisely (Grossmann, Oakes, & Santos, 2019). However, Kunzmann and Baltes (2003) found that wisdom is more related to the experience of reality than pleasure. Sometimes, it also takes an emotionally challenging position rather than self-centered leisure (Kunzmann & Baltes, 2003). Thus, not only do positive emotions account for wise behavior, but negative emotions also contribute to making wise decisions. Moreover, emotions are an important part of wise decision-making as they guide how we feel about those choices (Tiberius, 2008).

ii. Gender

Both wisdom and gender are culturally defined terms. Also, the cultural context in which men and women manifest wisdom may vary. As men and women socialize differently across cultures, some traits associated with each gender may be seen as less wise in some cultures than others. In fact, in some implicit studies on wisdom, men were seen as wiser than women (see. Ardelt 2008; Weststrate et al. 2016; Denney et al. 1995). In a patriarchal society, males also have advantages in showcasing their wisdom in many ways compared to females showcasing wisdom (see. Cheraghi, Kadivar, Ardelt, Asgari, & Farzad, 2015; Denney, Dew, & Kroupa, 1995; Weststrate, Ferrari, & Ardelt, 2016).

In contrast to nomination research, Pasupati et al. (2001) found that female adolescents performed better with wisdom-related performance than their male counterparts. Although there were gender differences found in past research, a systematic review by Mimi Xiong and Fengyan Wang (2021) found the effect size of these differences to be small. Also, earlier, there was a tendency to define wise in a masculine way. However, with more recognition of gender equality, these biases are fading away among researchers (Xiong & Wang, 2021). Moreover, the measurement of wisdom needs to be gender-neutral and gender-sensitive. Brienza et al. (2017) Situation Wise Reasoning Scale (SWIS) has items, situations dealing with the same and other sex, where male participants were found to have reasoned wisely when the gender of the other person in the conflict was female. Such items need to be included in other wisdom measurement tools also.

iii. Implicit and Explicit Methods

Defining and measuring as a new term in any field is difficult. So, to measure wisdom, some researchers like Baltes and Sternberg have defined wisdom in their terms, whereas other researchers such as Ardelt and others measure wisdom from the participant's perspectives (Bluck & Gluck, 2005). The prior one is called the explicit theory, in which researchers define the term, and the latter type of research is called implicit theory, in which the researcher takes the participants' perspective.

In terms of implicit wisdom, there were some commonalities in participants' nomination of wise people across time research (Weststrate et al., 2016). Weststrate et al. (2016) found a 54% overlap of shared exemplars like Mahatma Gandhi, Jesus Christ, and Martin Luther King with Paulhus et al. (1993) study. Hu et al. (2016) found that younger generations nominate acquaintance scholars and historical scholars more frequently than classmates, colleagues, and historical leaders. Participants in nomination studies gave importance to

cognitive qualities and personal growth while choosing their nominees (see. Sharma & Dewangan, 2018; Barber, Kireeva, Seliger, & Jayawickreme, 2020), and they also believed that age-related disorders like people with Alzheimer's disorder do not have any relation with wisdom (Barber et al., 2020). Implicit definitions are important to understand laypeople's views, whereas explicit definitions are important for empirical testing. Three types of explicit conceptualization of wisdom can be identified in the previous studies- aspect of personality development in adulthood, post-formal dialectic thinking, and definition of wisdom as an expanded form of intelligence and cognitive-emotional expertise (Kunzmann & Baltes, 2005). A few of the models developed through explicit theory include the Berlin Wisdom Paradigm (Baltes & Staudinger, 1993), the Balance theory by Sternberg (1998), the Three-Dimensional Wisdom Paradigm (Ardel, 2004), the Model of Emergent Wisdom (Bassett, 2005), MORE model (Gluck and Bluck, 2013).

It is essential to study wisdom with implicit and explicit methods and if there is an overlap between them. Wisdom is part of an everyday conversation; it is not necessarily the same as wisdom researchers define it. However, it is important to objectively understand the scientific definition of wisdom, as everyday notions of wisdom vary with place and situations (Sternberg, 2004). However, wisdom researchers need to come to a consensus to define wisdom in both implicit and explicit terms.

iv. Culture

The notions of wisdom vary with place and situation (Sternberg, 2004). Eastern and Western cultures have contributed to developing the concept of wisdom; however, both have some commonalities and differences. These differences were the product of these cultures, places, and times, which resulted in the differences in mind, emotions, and education of people habituated in those places (Yang, 2011). The concept of wisdom was first associated with religious supremacy; however, it took scientific meaning during the Renaissance (Takahashi & Overton, 2005). Though the concept has been a part of philosophical discussion for a more extended period, it has only gained attention in psychology since the 1970s. Social sciences have avoided the topic for decades (Bluck & Gluck, 2005).

Empirical research on wisdom in the West started much earlier, while the concept began to be explored in an Eastern culture much more recently—both Eastern and Western view wisdom from different dimensions. Research in the West emphasizes gaining knowledge using analytical and objective methods, while Easterners believe gaining knowledge through analytical and synthetic methods is wise (Takahashi, 2000; Grof, 1983; Takahashi & Overton, 2005). Similar themes were immersed in Ekmekçi, Teraman, and Acar's (2014) review; researchers advocated that the Middle East perspective on wisdom must be explored to be culturally inclusive. Especially when we need to cross national and cultural boundaries in research, cultural concepts need to be taken into account to study wisdom (Gluck, 2018). Though folklore theories of wisdom and wisdom-related cognition are diverse across cultures (Grossmann and Kung 2019), empirical research on wisdom in Eastern culture found that the concept of wisdom in the East has already been influenced by globalization (see. Sharma & Dewangan, 2018; Hu. et al., 2016). Still, others pointed out that the dominant culture is found to have more influence in a given society (Grossmann & Kung, 2019).

Thus, much research has been done on both cultures, and their differences are evident in research based on earlier writings (e.g., Takahashi,2000). Review articles point out that more research needs to be done while keeping these differences in view (see. Ekmekçi, Teraman, and Acar, 2014; Takahashi, 2000). However, empirical research views due to

globalization, these differences may be reduced. There should be ways to preserve the cultural contribution to wisdom, as each culture can contribute to the concept uniquely.

v. Age

In Erikson's theory of personality development, he mentioned the stage of generativity vs. stagnation. One who could successfully complete this stage can be regarded as wise. However, according to this theory, this stage could only occur later in life. Thus, only people with several years of experience can be considered wise! Review articles state that age is neither sufficient nor necessary to achieve wisdom (Sternberg, 2005; Staudinger, 1999). This view of gaining experience is equated with wisdom because society views youth as a time of pick of all kinds of gain. Old age is regarded as the stage of loss of physical attributes while gaining experience. The only attribute that seems to have increased during old age is Wisdom (Baltes & Staudinger, 1993). Indeed, genetically evolved cognitive mechanisms (e.g., memory) decline with age; it is compensated with culturally evolving cognitive pragmatics (e.g., wisdom) (Baltes & Staudinger, 1993; also see Grossmann et al., 2010; Stundinger, 1993). Later in 2005, Sternberg found contradictory results between age and wisdom in a review article. More than age, cognition, personality, and life experiences matter in developing wisdom (Sternberg, 2005). Other components during old age that result in individual wisdom are -1) an increase of some specific components in old age- social reasoning and decision making, emotional regulation, spirituality, and decisiveness; 2) the grandma hypothesis; 3) neuroplasticity (Jeste & Oswald, 2014).

Four factors that were found to be a predictor of wisdom that dominated age-related studies include life satisfaction (Ardelt, 1997), mastery (see. Ardelt & Ferrari, 2018; Ardelt, 2018; Cheraghi et al., 2015; Pasupathi et al., 2001), defining the age of wisdom (Denney et al. 1995; Jeste & Oswald, 2014; see. Baltes, 1995; Baltes & Stundinger, 2000), and experience (see. Staudinger, 1999; also see Thomas & Kunzmann, 2013; Webster, Westerhof, and Bohlmeijer, 2012). Other than individual wisdom, society at large is becoming wiser and offering compassionate behavior toward older adults (Jeste & Oswald, 2014). From past research, it can be seen that the relationship between age and wisdom is not very clear. Depending on which measure of wisdom is used, relationships may increase, decrease, or stay stable (Gluck, 2019). Thus, it depends on the methods used to measure wisdom.

vi. General vs. Personal Wisdom

An individual may be wise regarding the decision in one's life but may not be wise when giving advice and vice versa (Sternberg, 2004). Staudinger's distinction between personal and general wisdom in the 1990s is a philosophical distinction between the first-person and second-person views (Mickler & Staudinger, 2008; Staudinger, 2013). Whether personal and general wisdom lies in a continuum requires more extensive research (Staudinger, 2013). However, these subtypes are assumed to be related and not entirely separated (Mickler & Staudinger, 2008).

Mickler and Staudinger (2008) developed a measurement to measure personal wisdom based on the Berlin wisdom paradigm using the concept of personal maturity that can be achieved when one's interests and potential match society's well-being. Although this distinction was introduced in the late 1990s, it was always a part of empirical research in wisdom. Any conception of wisdom that focuses on wisdom as personal characteristics or patterns of personality can be regarded as personal wisdom research (Staudinger, 2019) (see Zacher, Pearce, Rooney, and McKenna, 2014; Igarashi, Levenson, & Aldwin, 2018; Kutor, Raileanu, & Simandan, 2019). Although this distinction between personal and general wisdom was established in the 1990s, the effort to progress this distinction was prolonged. Very little

research has been done now exclusively on personal wisdom, and few compare personal and general wisdom (Staudinger (2019).

d) Application to other fields

Over the last decade, wisdom research has spread to other fields of psychology, taking the construct to an applied form. This section explores wisdom in applied fields of psychology, including positive psychology, organizational psychology, and cognitive psychology.

Seligman and Peterson (2004), in their book *Character Strengths and Virtues: A Handbook and Classification*, mentioned wisdom and knowledge as one character strength. This character strength of wisdom and knowledge includes those cognitive aspects of psychology that help lead a good life. It includes creativity, curiosity, open-mindedness, a love of learning, and perspective (Peterson & Seligman, 2004).

One striking difference between wisdom in positive psychology and wisdom by contemporary psychologists is that wisdom in positive psychology is viewed as a cognitive aspect. However, contemporary wisdom researchers refrain from accepting it as cold cognition and include affective and contextual dimensions (Baltes & Kunzmannb, 2004; Ardelt, 2004a). Another difference is that in positive psychology, wisdom is viewed as a trait-like aspect with no value attached to it; contemporary psychologist views it as either pragmatic knowledge of life (Baltas & colleagues), personality types (Ardelt), or person-situation aspect (Grossman). Wisdom in positive psychology has different virtues, whereas it is a whole concept in contemporary psychology.

Wisdom in organizational psychology does not have a long empirical history. Perhaps the first research on wisdom with the working population was done by Smith, Staudinger, and Baltes (1994), comparing clinical psychologists with a controlled population. Thereafter, much research is done on the working population (see. Greaves, Zacher, McKenna, & Rooney, 2014; Zacher, McKenna, Rooney, & Gold, 2015), though wisdom research in organizational psychology is still to develop. Since then, wisdom in organizational psychology has spread into many subfields, such as consumer behavior (see. Mick, Spiller, & Baglioni, 2012; Luchs & Mick, 2018), marketing (see. Mick, Bateman, & Lutz, 2009; Johnston, 2018), ergonomics (see. Gärtner, 2011), and leadership (see. Mckenna; Rooney & colleagues). One prominent wisdom research in organizational psychology is Social Practice Wisdom (SPW) by Bernard Mckenna and David Rooney. SPW is a bland of leadership philosophy and contemporary wisdom theory. According to them, understanding the development of wisdom is necessary to build an organization with strategic reflection, different ways to lead, and a more holistic and democratic way of expressing authority. Five concluding levels of the pyramid include acquiring facts to use in interpersonal coping in the physical environment, organizing knowledge in the emotional environment, knowledge management, strategic management, coping with stress and intellectual endeavor, and ethics. Rooney and McKenna (2007) advocated the importance of inculcating wisdom in the organization. In their review, Ekmekçi, Teraman, and Acar (2014) found few literature gaps. According to them, corporate social Responsibility can be related to wisdom, and the effect of wisdom on creativity in the organization needs to be explored.

Cognition was always part of wisdom, whether in the Berlin Wisdom Paradigm or the three-dimensional Wisdom Model. Indeed, it was never only cold cognition, unlike concepts like intelligence. In cognitive science, the word cognitive or cognition means thinking,

reasoning, memory, emotion, and perception (Vervaeke & Ferraro, 2013). According to Ardelt and Ferrari (2014), wisdom involves emotion and cognition. Depending on the emotional importance, cognition makes us regulate emotion or emotional compass direction to lead a good life for ourselves and the community. In the model provided by Meeks and Jeste (2009), which reviews the literature on neurobiology and wisdom, the prefrontal cortex (PFC) has a special role in wisdom. According to them, dorsolateral PFC, along with dorsal Anterior Cingulate Cortex (ACC), OFC, and medial PFC, have some inhibitory effects on brain areas related to emotionality and immediate reward dependence and facilitate other subcomponents such as pragmatic life knowledge and decision-making, emotional homeostasis, value relativism, and processing ambiguity. Other emotion-based areas such as the medial PFC, Posterior Cingulate Cortex (PCC), Orbitofrontal Cortex (OFC), Superior Temporal Sulcus (STS), and reward neurocircuitry responsible for emotional regulation, self-reflection, and self-awareness act as a complementary to the rational or analytical aspect of Wisdom (Meeks & Jeste, 2009). Prosocialbility, as mentioned by 40% (highest) of the scientists in the Common Wisdom Model as a characteristic in their working definition of Wisdom (Grossmann et al., 2020), is regulated by components such as PCC and STS (Meeks & Jeste, 2009). Thus, in cognitive terms, wisdom is the judgment of value and the rationing of resources; that is, rationality is construal and caring rather than theoretical argumentation. Wisdom is a medium of cognitive processing rather than the content of the cognitive product (Vervaeke & Ferraro, 2013). In recent years, wisdom has been explored and inculcated in domains such as artificial intelligence (AI), which is considered an imitation of human intelligence. However, for human flourishing, there is a need for Artificial Wisdom (AW) (Kim & Mejia, 2019; see. Lee et al., 2022; Jeste et al., 2020). AW's work needs to be broader than morality, and it needs to include the domains of morality, marriage, career, parenting, aging, illness, poverty, homelessness, crime, and so on (Tsai, 2020). According to Tsai (2000), researchers need to develop the science of well-being rather than the philosophy of well-being for AW.

Research of Wisdom has already started in applied fields. However, the confusion over the standard definition of wisdom also seems to prevail in applied fields, making the common definition necessary.

2.3. Conclusion

In sum, though there was a vagueness in the definition of wisdom and what constitutes it, it has been refined with the expansion of more research. There are a few themes that wisdom literature commonly focuses on, and it has expanded to applied fields. In the current thesis, we will take guidance from the methodology used by the wisdom research previously. In Chapter 3, we will first explore the literature on wise negotiation and what could constitute it, which will help us formulate an explicit definition of wise negotiation.