Relationship between Wisdom and Coping in College Students

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Relationship between Wisdom and Coping in College Students

BY

Mahip Rathore

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Abstract

Wisdom is known as the pinnacle of personal growth and psychological functioning in humans. It has a distinguished place in philosophy and religion. Its examination as a psychological process started only a few decades ago, and has been a growing area of research since then. However, very limited research has been conducted so far that explores the developmental process of wisdom. The purpose of the present study was to investigate wisdom as a function of coping with difficulties of life. Only two studies have attempted to establish the relationship between wisdom and coping, with one being primarily qualitative in nature (Ardelt, 2005), interviewing individuals who have been judged as ‘wise’ about how they usually cope with difficult life situations. Kanwar’s (2013) correlational analysis which examined the coping styles of wise individuals and few other variables in relation to wisdom had some limitations which the present study addressed. The current study specifically examined the relationship between twelve different coping strategies and the three dimensions of wisdom: cognitive, reflective and affective. One hundred and sixty college students responded to well-established psychological measures of wisdom and coping. The results showed that the coping strategy of positive reinterpretation and growth strongly predicted the development of wisdom, while strategies like focusing on venting of emotions and denial encumbered wisdom. The results confirmed findings of past research and also demonstrated new relationships between coping and wisdom. Possible explanations for the outcomes, recommendations for future research, and clinical implications are presented.
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Relationship between Wisdom and Coping

Wisdom is considered to be the pinnacle of personal growth or psychological functioning in humans. Philosophers are always curious about wisdom, and have been studying it for the last two thousand years. How to become wise, is without a doubt one of the most celebrated topics in philosophy as the term ‘philosophy’ in itself means ‘love for wisdom’. Individuals like Socrates, Solomon, Dalai Lama, Mahatma Gandhi, Martin Luther King and the like are known and revered for their extraordinary wisdom. But what is it that makes these individuals different from others? What has led to the growth of wisdom in them?

Though wisdom has been well-discussed in the realm of philosophy, the examination of wisdom as a psychological phenomenon or process started only a few decades ago, and has become a growing area of psychological research since then. Studies have begun to investigate wisdom as a developmental process, exploring the various psychological processes (e.g., behaviors and traits) that are associated with wisdom.

The present study contributes to this growing literature by specifically examining the relationship between coping strategies and wisdom. What different coping strategies applied by individuals in difficult life situations are associated with wisdom and its cognitive, affective, and reflective dimensions? Only two studies have attempted to establish the relationship between wisdom and coping, with one being primarily qualitative in nature (Ardelt, 2005), interviewing individuals who have been judged as ‘wise’ about how they usually cope with difficult life situations. The current study tested this relationship using a quantitative analysis by asking participants to respond to well-established psychological measures of wisdom and coping, and examining the correlations between the variables.
Concept of Wisdom

"By three methods we may learn wisdom: First, by reflection, which is noblest; second, by imitation, which is easiest; and third by experience, which is the bitterest."
— Confucius

Wisdom has always been an aspiration for scholars and philosophers around the world, who have tried all sorts of means either to attain it or at least to understand its nature and origin. The term ‘philosophy’ is derived from two Greek words, ‘Philo’ which means ‘love’ and ‘Sophia’, which means ‘wisdom’. So, philosophy itself represents the love for wisdom. This clearly demonstrates how intensely the idea of wisdom is engraved in the subject of philosophy and how central it is for philosophers from an academic point-of-view. Why wisdom is such an intriguing topic for philosophers, is the question which comes to mind when one sees the vast literature on it in philosophy. The reason simply is that wisdom is highly valued and considered to be the pinnacle of insight into the human condition and about the means and ends of a good life (Baltes, Smith, & Staudinger, 1992; Kekes, 1995). Wisdom enjoys a prominent place in numerous philosophies of human development and ancient religious and spiritual traditions (Birren & Svensson, 2005; Jeste & Vahia, 2008; Osbeck & Robinson, 2005). Wise individuals are known to have expert knowledge about human existence and worldly matters and are also known to have overcome the temptations of the mundane world, to lead a balanced and peaceful life.

Among all, the most essential reason, why people have been pursuing wisdom for thousands of years is that the path to wisdom also leads to liberation from many forms of human suffering. Siddhartha Gautama, also known as the ‘Buddha’ in his journey towards enlightenment or the ultimate wisdom, developed a strong will to find liberation from human
suffering after witnessing death, sickness and old age (Carmody & Carmody, 1994; Kohn, 1994; Nanamoli, 2001). Attainment of wisdom promises a peaceful life with diminished existential pain and suffering. This idea is enough to generate great curiosity and interest in the minds of people. This is a reason wisdom is no longer limited to the discipline of philosophy and has extended to various other domains such as psychology.

While philosophers give very articulate and insightful annotations about the nature, function, and evolution of wisdom, they seldom formulate ways to test their ideas and prescriptions empirically (Baltes & Smith, 2008). This is the area where psychological scientists can make a noteworthy contribution. In the last few decades, there has been a rise in research that treats wisdom as a psychological variable or process. To understand human growth, numerous contemporary investigators have begun to study the process of wisdom from a psychological point-of-view (e.g., Ardelt, 2000a; 2000b; 2008b; Baltes & Freund, 2003; Baltes & Staudinger, 2000; Clyton & Birren, 1980; Dittmann-Kohli & Baltes, 1990; Helson & Srivastava, 2002; Sternberg, 1998).

Research by Clayton and Biren (1980) investigated beliefs and integral theories about the nature of wisdom and the distinctiveness of wise individuals. They established that wisdom relates to cognitive, reflective and affective attributes, and that wise individuals are mature, intuitive, experienced, patient, empathic and knowledgeable. Successive studies further determined that generally common concepts of wisdom are substantially different from other sought-after psychological characteristics, such as creativity, intelligence, or maturity (e.g., Holliday & Chandler, 1986; Sternberg, 1985) Researchers have also found similarities in integral beliefs about wisdom across different cultural groups and diverse social settings. Other contemporary work in this area of research includes techniques developed to analyze the
behavioral characteristics and personality traits that are associated with wise individuals (e.g., Ardelt, 2004).

According to Baltes and Smith (2008), in psychological science, the study of wisdom has been approached in two different ways. The first approach examines the individual characteristics (personality, moral reasoning, etc.) of people who have been identified as ‘wise’. The approach might incorporate analyses of texts, speeches, and stories of ‘wise’ people. The goal is to arrive at a commonly accepted definition of wisdom based on the secondary data. The second approach taps into people’s perceptions of wise people. They are typically asked about what they believe wise people possess, how they identify wise people, what they believe makes these people wise, etc. The goal is also to learn common beliefs about wisdom but the primary source of information is the responses provided by a sample population. Application of various approaches in the study of wisdom is helpful in understanding this complex process as well as differentiating it from other psychological variables.

Unfortunately, the construct of wisdom is often confused with other constructs such as knowledge, creativity, intelligence or moral reasoning. According to Sternberg (1990), intelligence and creativity are the same as wisdom, except for their use. He further states that intelligent people look for automatic solutions and habitual ways to solve their problems faster. Creative people are often interested in finding new things, which are unique and are characteristically not interested in the “why” of what they do. On the other hand, a wise person seeks clarity and gets to the root of any problem by focusing on the question “why”, without relying on automatic assumptions. According to Ardelt (2008), intelligence involves discovering novel truths and wisdom on the contrary involves comprehending the depth of the existing ones. Furthermore, a wise individual has the ability to accept ambiguities, uncertainties and
discrepancies in life with comfort. But a creative person puts up with these aspects of life with discomfort and an intelligent person aims at solving ambiguity, and becomes capable of tolerating uncertainties only if he is wise along with being intelligent (Sternberg, 1990).

Kanwar (2013) stated that wisdom is a broader concept compared to moral reasoning. She explained that moral reasoning is restricted to matters of justice and fairness, but wisdom on the other hand includes insights and judgments about issues involving multiple aspects of life, including moral reasoning. Wisdom comes in handy in certain problematic situations that require a practical solution rather than a moral conduct.

Humbleness, transcendence of the self and knowing that they do not know it all are characteristics of the wise. Knowledgeable people on the other hand are not essentially humble, if they are deceived by the illusion that they know everything. Knowledgeable people can be susceptible to superiority and exorbitant ego, which the wise are capable of regulating (Ardelt, 2008). Given the above stated differences it is essential to separate wisdom from knowledge, intelligence, moral reasoning and creativity before examining it in the field of psychology.

**Definition and Process of Wisdom**

There had been several attempts to define and identity the components of wisdom (Dittmann, Kohli & Baltes, 1990; Kramer, 1990; Taranto, 1989). The balanced theory of wisdom by Sternberg (1990) defined wisdom as an application of tacit knowledge that is mediated by values for the achievement of common good by striking a balance among several extra-personal, inter-personal and intrapersonal interests with the intention to attain balanced adaptation to existing environments, shaping of existing environments and selection of new environments. Meta-cognition (acknowledgement of uncertainty and dialectical thinking skills), behavior (skill to act while facing uncertainty), and personality/affect (openness to new experiences along with
emotional stability in times of uncertainty) were laid down as the three main components of wisdom under the epistemic theory (Brugman, 2000; 2006).

McKee and Barber (1999) defined wisdom as “seeing through illusions”, which involves firstly to recognize several illusions pertaining to false belief, then to overcome the temptations of such illusions and lastly to have a sympathetic approach towards those who are under the spell of such illusions. The implicit theories of wisdom, which laid down the simplest and most easily understood definition of this psychological process framed wisdom as an ability to learn from ideas and environment, ability of reasoning, judgment, sagacity and perspicacity along with an expeditious use of information (Sternberg, 1990a); or as a combination of cognitive reflective and affective personality characteristics (Clayton & Birren, 1980).

Conclusively, however, most definitions of wisdom describe it as a multifaceted and multidimensional construct with cognitive, reflective and affective elements that are interdependent and inter-related. Ardelt (2000; 2004) also focused on the three main dimensions of wisdom based on past research done by Clayton and Birren (1980) who conducted a multidimensional scaling analysis of 12 wisdom attributes and defined this concept as an amalgamation of reflective, cognitive, and affective qualities.

Even though a universally accepted definition of wisdom does not exist, there has been an emerging agreement among philosophers, social scientists and lay people that wisdom, at least grows in cognitive, reflective and affective aspects (Achenbaum & Orwoll, 1991; Ardelt, 2011b; Ardelt & Oh, 2010; Jeste et al., 2010; Kekes, 1995; Manheimer, 1992; Meeks & Jeste, 2009; Sternberg & Jordan, 2005).
The cognitive dimension of wisdom entails a deeper understanding of the reality of life along with an insight into the intrapersonal and interpersonal areas of human existence (Ardelt, 2000b). A huge part of this kind of understanding is great knowledge about the concept of self along with an acceptance of its limitations and weaknesses. This component also includes the ability to take into account the unpredictability and uncertainty of life while one engages in
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problem-solving (Ardelt, Achenbaum & Oh, 2013). The cognitive dimension takes into account a person’s knowledge or beliefs about mankind that are the result of perspective-taking abilities. Although this perceptive-taking ability is not considered apart of cognitive wisdom as it is entailed in the reflective dimension of wisdom (Ardelt, 2000b). For the same reason, the reflective dimension of wisdom is a precondition for the growth of its cognitive dimension (Ardelt, 2003).

The reflective dimension covers within its scope the ability of a person to perceive reality as it is without getting affected by any kind of distortions. To be able to do this, one is required to engage in reflective thinking by looking at phenomenon and experiences from various perspectives to generate self-insight and self-awareness (Ardelt, 2003). This practice progressively diminishes one’s self-centeredness, projections, and subjectivity, and enhances insight into the real nature of phenomena, including the guiding factors of one’s own and other people’s behavior (Chandler & Holiday, 1990; Clayton, 1982; Csikszentmihalyi & Rathunde, 1990; Kramer, 1990; Orwell & Achenbaum, 1993; Rathunde, 1995; Taranto, 1989). In other words, the reflective dimension entails a person’s ability to overcome subjectivity and projections by looking at things objectively from different perspectives and not blaming other people or circumstances for their current state of affairs (Ardelt, 2003).

A decline in self-centeredness, subjectivity and projections when combined with a better understanding of human nature, tends to result in the enhancement of great sympathy and compassion towards other people (Ardelt, 2000b; Csikszentmihalyi & Nakamura, 2005; Levitt, 1999; Pascual-Leone, 1990). The presence of positive emotions and conduct towards other beings along with the absence of apathetic or negative emotions and conduct towards others is accounted for under the affective dimension of wisdom (Ardelt, 2003).
Ardelt (2003) stated that the three dimensions of wisdom are interdependent, but at the same time they are theoretically very dissimilar in concept. For example, feeling sympathy and compassion (affective component) is different from the ability to understand the deeper reality of the world (cognitive component). The presence of all three dimensions simultaneously in an individual is a prerequisite to be considered wise (Clayton & Birren, 1980). For example, a person who possesses reflective and affective components of wisdom but lacks the cognitive aspect might be considered well-intentioned and compassionate but would hardly be effective and successful in interacting with others (Webster, 2003).

Similarly, a construct entailing only cognitive and reflective components of wisdom can be described as intelligence or advanced cognitive functioning but would not be considered as wisdom (Ardelt, 2003). Lastly, Schmidbauer (1977) gave a very apt example of a sympathetic counselor who is unable to help his situation, to describe a person who is in possession of cognitive and affective components of wisdom but is lacking the ability to reflect upon things (reflective component).

Out of the three dimensions of wisdom, the reflective aspect is considered to be of utmost importance because it fosters the development of cognitive as well as affective dimension of wisdom (Ardelt, 2000a). A profound understanding of life and human nature emerges after contemplation of numerous points of view and a subduing of projections and subjectivity. Similarly, a reduction in negative emotions like depression, anger or hatred and rise in compassion and empathy occurs when one perceives reality without getting affected by projections (Ardelt, 2003). In addition to that, the practice of self-reflection helps people learn not to react to unpleasant sensations, and to recognize and identify with their own and other people’s motives and behavior (Hart, 1987).
The process of wisdom is usually considered to be a two-sided interaction between emotion and cognition, or personal experience and reflection (Berg & Sternberg, 1985; Kramer, 1990; Labouvie-Vief, 1982). This again involves a unique interest and ability to manage a dual process: the intention to approach cultural beliefs for answers, and simultaneously the urge to question such conventional answers in the light of personal experience—and also to enjoy these two processes at the same time (Sternberg & Jordan, 2005). But if there is a shift of focus towards one or the other direction of this dialectic process, the equilibrium breaks and the output can hardly be called “wisdom” (Sternberg & Jordan, 2005).

Development of wisdom is more than just an intra-psychic process, however, because it involves an interaction between people, on one hand, and knowledge stored in cultural beliefs, artifacts and behavioral trends on the other (Csikszentmihalyi & Nakamura, 2014).

Thus, a crucial thing about being wise is that in addition to having the ability to reason wisely, one has to have an interest in acquiring important information from past experience in order to resolve fundamental questions about human existence. It is also important whether the person is interested in knowing how cultures and traditions differentiate good from bad, true from false, and the beautiful from the ugly (Csikszentmihalyi & Nakamura, 2014). The skill to reflect on the stored or accumulated experiences, while confronting difficult life situations and to integrate affect and cognition—in order to become more aware of one’s projections by bringing the unconscious information to the conscious mind leads to maturity and wisdom (Kramer, 1990).

Sternberg and Jordan (2005) concluded that the pursuit and implementation of wisdom thrives on the joy one derives from the curiosity of learning, respect for past accomplishments, and an intense urge for improving on them; and all this with a conceptualization of the self which
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extends beyond the human existence as a whole. When there is a balance of all these attributes, a joyful immersion in the complexities of life occurs, that usually results into openness to experience along with a willingness to ponder upon the life issues concerning the self and the others. When this attitude attains maturity, the simple concept of understanding life becomes rewarding for an individual and he or she is seen as wise and also their actions are considered to be wise (Csikszentmihalyi & Nakamura, 2014).

The process of wisdom has been conceptualized in a sophisticated and elaborate manner in literature. The three-dimensional conceptualization laid down by Ardelt (2004) helps in simplifying the complicated nature of wisdom and classifies all its psychological attributes into three categories. Therefore, the same conceptualization and definition of wisdom were adopted for the purposes of the present study. In addition to this, an instrument called the Three-Dimensional Wisdom Scale (3D-WS) (Ardelt, 2003) developed to measure all three dimensions of wisdom is available for research purposes.

Measures of Wisdom

To measure wisdom, some researchers formulated a psychological construct of this philosophical concept and constructed scales or instruments to measure the construct. The most commonly used wisdom scales in the literature are Webster’s Self-Assessed Wisdom Scale (SAWS) (Webster, 2003) and Monika Ardelt’s Three-Dimensional Wisdom Scale (3D-WS) (Ardelt, 2003). Both are self-administered scales and were initially published in 2003 for use in large quantitative surveys (Ardelt, 2011). The SAWS was constructed after an extensive review of wisdom literature (Webster, 2003). This scale originally had 30 items but was extended to 40 items in 2007 to measure five components of wisdom: critical life experiences, emotional regulation, reminiscence and life reflection, openness to experience, and humor (Webster, 2007).
An exploratory and confirmatory factor analysis was used by Webster to validate the five-factor model.

Ardelt (2003) on the other hand systematized wisdom into three dimensions: cognitive, reflective and affective. This model was based on Clyton and Biren’s (1980) multidimensional scaling analysis. A study of the descriptions (provided by lay persons) about cognitive, reflective, and affective personality characteristics of wise individuals was conducted for the purposes of the above stated analysis. The wide-ranged three-dimensional description of wisdom appears to be well attuned to most of the inherent theories about wisdom (Blanchard-Fields & Norris, 1995; Manheimer, 1992; Sternberg, 1998, 1990; Sternberg & Jordan, 2005; Takahashi & Bordia, 2000). These three dimensions have been elaborately discussed earlier in the paper while the five components of wisdom entailed in the Self-Assessed Wisdom Scale (SAWS) are discussed in the next paragraphs.

Webster (2007) differentiated critical life experiences from the accumulated general life experiences and stated that experiences that are tough, morally challenging and require (or perhaps facilitate) some insightfulness are critical life experiences leading to wisdom. Emotional regulation has been one of the main components of wisdom according to many researchers (e.g., Ardelt, 1997; Clayton & Birren, 1980; Holliday & Chandler, 1986; Kramer, 1990; Orwoll & Perlmutter, 1990). Webster (2007) stated that emotional component of wisdom entails a profound sensitivity to the gross distinctions, minute details, and sophisticated blends of the full variety of human affect. Recognizing, accepting, and applying emotions in a beneficial way is a yardstick of wisdom.

Life review has been identified as one of the most essential functions of wisdom (Kramer, 1990). Webster (2007) considered reminiscence and reflectiveness to be one of its components
and described that evaluative reflection on one's past and present experiences assist in the fostering of many beneficial psychological functions, such as character formation and maintenance, self-knowledge, problem solving and coping. The above statement implies an antecedent-consequence sequence, whereby life reflection is causing the growth of wisdom. Although, many researchers admit that these two phenomena arise in a reciprocal manner and are interdependent (Webster, 2007).

Staudinger, Lopez, and Baltes (1997) found openness to experience as one of the strongest predictors of wisdom-related performance. Other researchers (e.g., Arlin, 1990; Taranto, 1989; Wink & Helson, 1997) considered openness to be a critical component of wisdom. Webster (2007) on a similar note established openness as one of the dimensions of wisdom and stated that openness involves the ability to explore new possibilities, entertain unharmonious opinions, and investigate innovative approaches to day-to-day challenges of life. Vaillant (1977) who worked on the subject of mature defense mechanisms suggested that wise people recognize, take pleasure in, and utilize humor in a range of contexts and for various purposes. Erikson (1963) defined humor as "the ability at rare moments to play with and to reflect fearlessly on the strange customs and institutions by which man must find self-realization" (p. 406). Inspired by above stated ideas and similar research by other authors (e.g., Taranto, 1989), Webster (2007) included humor as the fifth and the last component of wisdom in the Self-Assessed Wisdom Scale (SAWS).

The manner in which wisdom has been defined makes it a personality characteristic, rather than a performance-based attribute which is likely to vary a lot from one context to another (Sternberg, 1998). Also because of its sophisticated definition, it is unlikely to find many people that might be able to satisfy all the aspects of its description. Regardless of this fact, it should
still be possible to analyze how close, people can come to this ideal state (Ardelt, 2003). Meeting wise individuals is seen as an opportunity because, firstly they are less in number and secondly they are a great source of knowledge about life lessons and life attitudes.

The combination of cognitive, reflective and affective abilities provides a wise individual with a variegated set of skills to deal with different type of life problems effectively. Hence coping well with life challenges is one of the main characteristics of a wise person. Obstacles and challenges in life is something every single person has to go through, not only once but at several stages of development. Hence, studying wisdom literature or assessing wise individuals is not only helpful for research purposes, but also holds great significance for people at large, as it opens the door to a great reserve of knowledge about fundamental pragmatics of life, technicalities of human condition and ideal ways to cope with them.

Interestingly, almost all the practices wise individuals indulge in for dealing with difficult life situations are nothing but a set of highly advanced stress related coping strategies. For example, seeing things in a different light or having different perspectives of a phenomenon, learning from life experiences and accepting reality as it is, are some of the techniques applied by wise persons or characteristics that are attributed to wise individuals. These are very effective ways of coping with several unpleasant life events and dealing with the stress coming out of it.

Therefore, it wouldn’t be incorrect to state that wise people possess extraordinary coping skills to deal with life stress or conversely learning effective ways of coping with complicated life situations makes a person wise. The current study will examine the relationship between wisdom and coping. Wisdom will be measured using the Three-Dimensional Wisdom Scale (3D-WS) (Ardelt, 2003) because research has indicated that 3D-WS is reliable and valid instrument
for measuring wisdom and its three dimensions: cognitive, reflective and affective (Ardelt, 2003).

**Coping**

The literature on coping undisputedly suggests that its origin lies in the conceptual analysis of stress and coping done by Richard Lazarus in 1966 and the same investigation served as a cornerstone for various researchers who explored more ways in which people cope with stress (Carver, Scheier, & Weintraub, 1989). Likewise, the most widely accepted definition for coping is the one laid down by Lazarus & Folkman, (1984). They define coping as “constantly changing cognitive and behavioral efforts to manage, (that is master, tolerate, reduce, minimize) specific external and/or internal demands, (and conflicts among them), that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p.141)

The above definition demonstrates that the mechanism of coping has three fundamental processes: identifying a threat, formulating a response to that threat, and finally executing that response against the threat. In certain situations, individuals can adaptively cope and counter the stress if they can control their physiological reactions, manage emotions, think constructively, and direct their behavior (Compas, Connor-Smith, Saltzman, Harding-Thomsen, & Wadsworth, 2001). On the other hand, if the individuals are not able to apply their resources to deal with the stressful situation, they end up facing detrimental consequences (Boin, 2014).

The Transactional Model of Stress and Coping developed by Folkman, Schaefer & Lazarus (1979) sets out a differentiation between two major types of coping: adaptive and maladaptive. Identification of stressful situation, seeking out possible support, reflecting on probable courses of action, and actively taking actions in order to resolve the situation are all parts of adaptive coping (Obritsch, 2013).
On the other hand, maladaptive coping generally involves efforts to withdraw from stressful situations or stay away from having to deal with the stressor (Obritsch, 2013). It is difficult to tell at this point of time whether wise people will engage in more adaptive or maladaptive ways of coping.

The Ways of Coping Scale developed by Richard Lazarus and Susan Folkman (1980), laid down a distinction between two forms of coping: problem-focused and emotion-focused. They defined problem-focused coping to include acts which directly deal with the root of the stress, such as planning, information seeking and prioritizing the stressor over other required activities.

In contrast, emotion-focused coping includes activities focused on the reduction or management of emotional distress caused by the stressor. Seeking emotional support from others, accepting the existence of the stressor, and positively reframing the stressor are some examples of emotion-focused coping (Folkman & Lazarus, 1980; revised by Folkman & Lazarus, 1985). It is again unclear as to whether wise individuals use more problem-focused coping techniques or the emotion-focused coping techniques for dealing with difficult life situations.

Another coping factor that has become prominent in the research literature of stress and coping is avoidant coping (Obritsch, 2013). Suls and Fletcher (1985), defined avoidant coping as the act of removing one’s attention away from the root cause of stress as well as away from one’s psychological reactions caused by the stressor. Some of the avoidant coping techniques are distracting one-self from the stressor, giving up trying to deal with the stressor and using substances to avoid dealing with the situation. It would be interesting to find out if wise people indulge in avoidant coping strategies to handle stressful situations.
After the construction of Ways of Coping scale, several coping factors were formulated and focus of research no longer remained limited to problem focused or emotion focused coping, but extended to include avoidant coping also (Coyne, Aldwin, & Lazarus, 1981; Folkman & Lazarus, 1985; Schier, Weintraub, & Carver, 1986). To accommodate the new coping strategies, Carver, Scheier, & Weintraub, (1989) developed the COPE.

The COPE was initially laid down to assess 13 explicit types of coping behaviors, but at a later stage Carver et al. (1989) added two more subscales: substance use and humor. However, these two were not included in Carver et al. (1989)'s original factor analysis. The purpose of COPE scale is to assess the actions and thoughts that people engage in while dealing with stressful situations. The 15 subscales of the COPE enumerate 15 coping strategies people use to deal with stress and each item represents specific thoughts or actions chosen by people in order to cope.

Coping Strategies

The behavioral and cognitive actions and thoughts that people engage in to alter or deal with stressful life events are called coping strategies (Lazarus & Folkman, 1984). There can be numerous ways through which one can deal with stressful life events. Carver et al., (1989) listed the most commonly used coping strategies in formulating the COPE Scale.

Lazarus (1993) makes a contextual assumption that it depends upon a particular person, the type of situation, the duration of time, and the outcome modality being studied, such as well-being, social functioning or morale, whether a coping strategy is either good or bad. To independently assess the adaptiveness or mal-adaptiveness of coping thoughts and actions under stress, one must evaluate them separately from their outcomes (Lazarus, 1993).
Table 2

**Definitions of Coping Strategies (Carver et al., 1989)**

<table>
<thead>
<tr>
<th>Coping Strategies</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Planning involves a lot of thinking about how to deal with a stressor and then coming up with certain action strategies or tactics. Considering all the steps that are required to best cope with the stressor is also part of the planning.</td>
</tr>
<tr>
<td>Restraint coping</td>
<td>Waiting for an appropriate opportunity to act and holding oneself back in order to avoid premature action is termed as restraint coping.</td>
</tr>
<tr>
<td>Suppression of competing activities</td>
<td>In order to focus on the stressor and deal with it, when other projects are kept aside as an attempt to avoid getting distracted by them or simply not letting other things slide in as a distraction come under suppression of competing activities.</td>
</tr>
<tr>
<td>Active coping</td>
<td>Taking direct actions to get rid of the problem and if required taking additional actions to get around the problem comes under active coping.</td>
</tr>
<tr>
<td>Seeking social for instrumental reasons</td>
<td>Seeking information, assistance or advice from friends, family or any organ of the community comes under coping strategy of seeking social for instrumental reasons.</td>
</tr>
<tr>
<td>Seeking social support for emotional reason</td>
<td>Receiving sympathy, sense of understanding, or moral support from the social environment comes under the coping strategy of seeking social support for emotional reasons.</td>
</tr>
<tr>
<td>Positive reinterpretation and growth.</td>
<td>Looking at the stressor from a different point of view to make it seem more positive and learning something from the experience or growing as a person as a result of the experience comes under positive reinterpretation and growth.</td>
</tr>
<tr>
<td>Acceptance</td>
<td>Learning to live with what has happened by accepting the reality and the fact that it cannot be changed is coping by way of acceptance.</td>
</tr>
<tr>
<td>Turning to religion</td>
<td>To deal with a stressful situation when one puts one’s trust in God, to seek his help by praying more than usual and tries to find comfort in religion then such a coping is defined as turning to religion.</td>
</tr>
</tbody>
</table>
Focusing and venting of emotions

The predisposition to focus on one's experience of distress and then to ventilate the feelings that come out of it is described as focusing and venting of emotions (Scheff, 1979).

Denial

Refusing to believe that something has happened or thinking as if the stressor never existed or is not real comes under coping with denial.

Behavioral Disengagement

Coping under behavior disengagement involves minimizing one's effort to deal with the stressor and it may also mean giving up the attempts one makes to achieve a certain goal, which is in conflict with the stressor.

Mental Disengagement

Coping under mental disengagement occurs through several types of activities such as daydreaming, escaping through sleep, or escape by immersion in TV, that serve as a distraction from pondering upon the goal or behavioral dimension with which the stressor is interfering.

Substance use

Using alcohol or drugs in order to think less of the stressor and feel better comes under substance use coping.

Humor

Making fun of the stressor or the situation and kidding around about it comes under humor coping.

Relationship between Wisdom and Coping Strategies

Wise individuals are known for certain characteristics such as having an integrated personality, being able to make decisions in difficult and uncertain life situations, maturity, satisfied with life and capable of dealing with obstacle and crisis that life offers (Ardelt, 2000a; 2000b; Assmann 1994; Baltes & Freund, 2003; Bianchi, 1994; Kramer, 2000; Sternberg, 1990b; 1998). Furthermore, successfully coping with hardships of life and crisis situations is not only a distinct characteristic of wise individuals but may also be considered as one of the pathways to wisdom (Ardelt, 1998; Kramer, 1990; Pascual-Leone, 2000). Therefore, once a relationship between coping and wisdom is established, it will set up a ground for further research into the development of wisdom, an unexplored area of wisdom literature.
According to Ardelt (2005), very little research has been done to analyze how wise people cope with the hardships and obstacles of life. Although as stated above, wise people are known to possess the knowledge and ability to use various coping strategies at different stages of life as per their requirement and applicability. Thus, examining the relationship between wisdom and coping strategies is of utmost importance from a therapeutic point of view, as learning new and effective ways of coping with life problems is usually the main aspect of therapy interventions.

**Previous Research on the Relationship between Coping and Wisdom**

Monika Ardelt has studied the concept of wisdom extensively for years. One of her major contributions in this field is the development and empirical validation of the Three-Dimensional Wisdom Scale (3D-WS) (Ardelt, 2003). Ardelt (2005) stated that no research has so far investigated the relationship between wisdom and the manner of coping. In order to find out how wise individuals cope with obstacles and hardships of life, she conducted a qualitative study in which older individuals were interviewed and measured on their wisdom scores (Ardelt, 2005).

One hundred and eighty older adults were recruited from north central Florida to participate in a “Personality and Aging Well Study”, which was initially set up to develop and validate the Three-Dimensional Wisdom Scale (3D-WS) (Ardelt, 2003). Ten months after this study, ten respondents with relatively low score on each of the cognitive, reflective and affective dimensions of the 3D-WS, eighteen respondents with a median score on the 3D-WS, and twelve respondents with a relatively high score on the 3D-WS, were selected for semi-structured qualitative interviews (Ardelt, 2005).

The interviewees were asked questions regarding the most pleasant as well as the most unpleasant events they had experienced during the last week, month, year, and the entire life. The participants were also asked what they did to cope with the unpleasant events of life. The
The purpose of this question was to identify coping strategies that reflect cognitive, reflective, and affective skills of the respondents, which they learnt while facing crisis and hardships in past (Ardelt, 2005). The interviews were recorded on tape and then were transcribed verbatim. Three independent judges rated these qualitative interviews on the basis of a list of one hundred and twenty-seven wisdom characteristics which were derived from three empirical studies on inherent wisdom theories (Clayton & Birren, 1980; Holliday & Chandler, 1986; Sternberg, 1990a).

Qualitative interviews of three respondents who were rated relatively high on wisdom by the judges and had scored high on 3D-WS were compared with the qualitative interviews of three respondents who scored low on 3D-WS and were given low rating on wisdom by the judges. The purpose of this study was to analyze the most extreme cases available, and highlight their possible differences by contrasting the coping strategies of relatively wise older people with the coping strategies of older people who were relatively low on wisdom (Ardelt, 2005).

A method called analytic induction (Katz, 2001) as well as sentence-to-sentence analysis procedure was used to investigate the interviews in detail. Coping strategies that were reportedly used by three respondents high on wisdom score was treated as an integral part of wisdom theory, whereas coping strategies that were utilized by just one or two of such respondents were further investigated to find out how they are compatible with the coping strategies of other respondents. Afterwards, the coping responses of the three participants who had low wisdom scores were analyzed in the same manner (Ardelt, 2005).

Interviewees who scored high on wisdom stated that they use mental distancing, learning from life experiences, active coping, and recognition of life uncertainties as ways of coping in life. On the other hand, interviewees who scored low on wisdom stated that their most frequently
used coping strategies were avoidance of reflection, reliance on God, passive coping and acceptance (Ardelt, 2005).

For a qualitative study, Ardelt (2005) made a very sophisticated effort in analyzing the different ways of coping used by individuals with high as well as low score on wisdom. Still the first and foremost limitation of this study is that it was a qualitative analysis of the responses of only six older individuals from central Florida. The results cannot be generalized over other age groups and culturally different groups given the small sample size.

A correlational study was conducted by Kanwar (2013), exploring the relationship of wisdom with several other variables such as subjective well-being, gender, age, social desirability and coping styles. The purpose of this study was to provide a brief overview of the characteristics of wise people and the practice of wisdom in everyday life. Kanwar (2013) examined the coping styles of wise people, differences in wisdom associated with age and gender, degree of social desirability in wise individuals, and relation of happiness with wisdom.

Kanwar (2013) had 105 (56 males and 49 females) participants in her study, who were all from the northern part of India. This sample consisted of 46 young-adults (19-26 years) who were college students, 39 middle-aged adults (39-56 years) who were school teachers, and 20 older adults (63-95 years) who were retired but physically healthy and were selected through snowball sampling method.

Kanwar (2013) measured wisdom using the Self-Assessment Wisdom Scale (SAWS) (Webster, 2003; 2007), subjective well-being using the Satisfaction with Life Scale (SWL) (Diener et al., 1985) and Positive and Negative Affect Schedule (PANAS) (Watson, Clark & Tellegen, 1988), Social Desirability using Balanced Inventory of Socially Desirable Responding (BISDR; Paulhus, 1991), and coping using the Brief COPE (Carver, Scheier, & Weintraub,
1989). Only wisdom and coping measures are discussed in detail as they are crucial from the point of view of the present study.

The Self-Assessment Wisdom Scale (SAWS) (Webster, 2003; 2007) is a 40-item questionnaire which provides a total wisdom score along with score for 5 dimensions, which include Critical Life Experiences- (e.g., “I have experienced many painful life events”), Reflection/Reminiscence- (e.g., “I often think about connections necessarily between my past and present”), Emotional Regulation(e.g., “it is easy for me to adjust my emotions to the situation at hand”), Humor (e.g., “I can chuckle at personal embarrassments”, Openness (e.g., “I enjoy sampling a wide variety of different ethnic foods”). All the responses were measured by a Likert-type scale (1- strongly disagree to 5-strongly agree).

Coping was measured using the Brief COPE (Carver, Scheier & Weintraub, 1989) which entails indicating responses on a 4 point Likert scale (1= I haven't been doing this at all to 4= I have been doing this a lot). The instrument has 28 items measuring 14 subscales. Three scales of four items each assess different types of problem-focused coping (active coping, seeking of instrumental social support, planning); six scales assess responses that are considered to be emotion-focused coping strategies (seeking of emotional support, positive reinterpretation, humor, acceptance, turning to religion, denial); and five scales assess coping responses that are considered to be less useful (focus on and venting of emotions, behavioral disengagement, self-blame, self-distraction, substance use).

The bivariate correlational analysis showed a positive correlation of wisdom with the coping styles of positive reframing, active coping, acceptance, humor and planning. On the other hand, behavior disengagement was found to have been negatively correlated with wisdom. The correlation of several other coping styles such as reliance on religion, denial, venting, substance
use, self-distraction, instrumental support, emotional support and self-blame was reported to be insignificant.

With regard to the subscales of SAWS and the Brief COPE, reflection and reminiscence was found to be positively correlated with active coping, planning, positive reframing, self-blame, instrumental support, emotional support, and acceptance. The component of critical life experiences was found to be positively correlated to active coping, planning, and self-blame. A strong positive correlation was also seen between openness to new experiences component of wisdom with positive reframing, and planning.

Negative correlation was observed between reflection and reminiscence component of wisdom and denial. Avoiding facing the reality and the self contributes to denial and obstructs in bringing about self-awareness which is an essential part of reflection and reminiscence element of wisdom. Coping using religion was found to be negatively correlated with the humor component of wisdom. No other significant correlations were reported various coping styles and the five components of wisdom in Kanwar’s (2013) correlational analysis.

There are some limitations to the Kanwar (2013) study. The brief version of the COPE scale was used which has less number of subscales with only two items per subscale (Carver, 1997). Secondly, the SAWS, treats humor as one of the five components of wisdom, while the Brief COPE scale also considers humor as one of the coping strategies. Thus, the observed correlation between wisdom and humor may reflect a conceptual overlap.

**Goal of the Present Study**

Ardelt (2005) and Kanwar (2013) are the only existing studies that have examined the relationship between wisdom and coping. The aim of the present study was to address the dearth in the literature. Unlike Ardelt (2005), it was quantitative in nature with a much larger sample
size. It was also an improvement over Kanwar (2013) in that wisdom is treated as a multidimensional construct. Analyses were conducted separately on the three dimensions of wisdom. Likewise, the complete set of 15 coping strategies was examined through the full version of the COPE Scale. This version has four items per subscale compared with the brief version used in Kanwar (2013) that had two items per subscale.

Lastly, the present study serves as a contribution to the growing literature on wisdom from a psychological rather than just a philosophical point-of-view. As stated earlier, wisdom entails the knowledge of coping effectively with uncertainties of life. The focus of this study has specifically been on coping-related aspects of the wisdom knowledge.

Knowing the best possible way of coping with life problems and knowing what manner of coping makes one a wiser person, were two outcomes of this study. The results of this study are significant from a therapeutic point-of-view. The cornerstone of most therapeutic interventions is that the client learns new coping skills or simply learns better ways of coping with life difficulties.

**Research Questions and Predictions**

The following were the research questions posed by the present study:

Research Question 1: What is the relationship between coping strategies and the construct of wisdom?

Hypothesis 1: Out of the 15 coping strategies, many were predicted to be associated with wisdom. It was predicted that coping strategies such as positive reinterpretation & growth, acceptance, active coping, planning, suppression of competing activities, restraint coping, humor, seeking social support for instrumental reasons, seeking social support for emotional reasons will possibly have positive correlations with overall wisdom.
On the other hand, coping strategies such as denial, focusing and venting of emotions, behavioral disengagement and mental disengagement were expected to have a negative correlation with overall wisdom. No prediction regarding the relationship of wisdom with other coping styles such as turning to religion and substance use was made due to the lack of past research. These predictions are summarized in Table 3.

Table 3

*Predicted Relationships between Wisdom and the Coping Strategies*

<table>
<thead>
<tr>
<th>Positive correlation</th>
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<tbody>
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<td>Behavioral disengagement</td>
</tr>
<tr>
<td>Active coping</td>
<td>Mental disengagement</td>
</tr>
<tr>
<td>Planning</td>
<td>Focus on &amp; venting of emotions</td>
</tr>
<tr>
<td>Suppression of competing activities</td>
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<tr>
<td>Restraint coping</td>
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<tr>
<td>Humor</td>
<td></td>
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<tr>
<td>Seeking social support for instrumental reasons</td>
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<tr>
<td>Seeking social support for emotional reasons</td>
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</table>

These predictions were based on some past research as well as certain theoretical conceptualizations. In a qualitative study (Ardelt, 2005), it was found that learning from life experiences; mental distancing, active coping, and recognition of uncertainties of life were used for coping by individuals who scored high on wisdom scale. Reliance on God, avoidance of reflection, passive coping and acceptance were used for coping by the participants who scored low on wisdom scale.

Similarly, the correlational analysis of a study that explored wisdom in relationship with coping styles, subjective well-being, social desirability, age and gender (Kanwar, 2013),
demonstrated positive correlations between active coping, positive reframing, planning, acceptance and humor with wisdom.

Negative correlation was found between the overall construct of wisdom and behavioral disengagement. Insignificant or no correlation was found between wisdom and variables such as denial, reliance on religion, venting, substance use, self-blame, self-distraction, instrumental support and emotional support (Kanwar, 2013).

Positively reinterpreting stressful experiences can lead to the acquisition of wisdom and empathy (Park, Cohen & Murch, 1996). Learning from life experiences is one of the items of positive reinterpretation and growth (Carver et al., 1989) and it has been mentioned as one of the main characteristics of a wise person in wisdom literature.

Many theorists share the opinion that wisdom can be fostered by the learning one acquires from life experiences (Ardelt, 2008; Baltes & Kunzumann, 2004; Bigelow, 1992; Bluck & Gluck, 2004; Ferrari et al., 2014; Kupers, 2007; Staudinger et al., 1992; Yang, 2008a). Therefore, use of particularly positive reinterpretation and growth for coping was predicted to result into the development of wisdom in an individual.

Wisdom includes an acceptance of positive as well as negative aspects of human experience and therefore wise individuals are less focused on decreasing negative affect related to stressful events and are more devoted to live with them and learn from them (Ardelt, 2005). Hence a positive correlation between acceptance and wisdom was predicted.

Later under the cognitive and reflective dimensions of wisdom, it has been discussed in detail that how coping with humor may predict the whole wisdom construct and it can also separately lead to its individual dimensions. Also, humor is considered as one of the facets or an important element of wisdom (Taranto, 1989; Webster, 2003).
Waiting for an appropriate opportunity to act and holding oneself back to avoid premature action is termed as restraint coping (Carver et al., 1989). One of the many characteristics of a wise individual is considering all the alternatives calmly before taking a decision or not to rush into acting prematurely. Therefore, a prediction was made that restraint coping will have a positive correlation with the construct of wisdom.

When other projects are kept aside, in order to avoid any kind of distraction while one focuses their complete attention on dealing with the stressor, then such a style of coping is defined as suppression of competing activities (Carver et al., 1989). The ability to focus on the task at hand and not getting distracted easily by other less important projects is another characteristic of a wise person, hence coping by suppression of competing activities was predicted to be positively correlated with wisdom.

Coping under mental disengagement occurs through several types of activities such as daydreaming, escaping through sleep, or escape by immersion in TV, that serve as a distraction from pondering upon the goal or behavioral dimension with which the stressor is interfering (Carver et al., 1989). This clearly involves taking the focus away from certain negative emotions that are unpleasant or stressful for the individual.

According to research, the memories that are related to negative emotions are not extensively organized in our cognitive networks, and causes poorer accessibility of such memories in an individual’s conscious awareness (Isen, 1989). Perhaps the distraction from such negative emotional experiences results into less extensive representation of them in the memory which is likely to affect the cognitive as well as the reflective ability of the person. Hence, it was predicted that coping through mental disengagement would be negatively correlated to the cognitive and reflective dimensions of wisdom and to the overall construct of wisdom.
Denial as a coping strategy has been defined as the act of refusing to believe that the stressor is real or simply refusing its existence (Carver et al., 1989). Philosophers often describe wisdom as accepting the reality the way it is or the ability of realizing the truth and reality of life and human existence. Coping with denial is very contradictory to this aspect of wisdom; therefore, both the variables were predicted to have a negative correlation with each other.

The correlation of active coping, planning, seeking social support for instrumental reasons and seeking social support for emotional reasons with specific dimensions of wisdom is discussed later in the paper. Although, based on that information a prediction regarding their positive correlation was made. Likewise, the correlation of focusing on venting of emotions with the affective dimension of wisdom has been discussed later and based on the same information a prediction about this coping strategy having a negative correlation with the whole wisdom construct was made.

Research Question 2: What is the relationship between coping strategies and the cognitive dimension of wisdom?

Hypothesis 2: The cognitive dimension of wisdom refers to a person's skill to comprehend life in a way that he or she understands the importance and deeper meaning of occurrences and affairs, particularly regarding intrapersonal and interpersonal concerns (Ardelt, 200b; Chandler & Holiday, 1990; Kekes, 1983; Sternberg, 1990a). This also includes the awareness of positive as well as negative aspects of human nature, implicit limits of knowledge, and recognition of life's uncertainties (Ardelt, 2003).

It was predicted that the coping strategies of positive reinterpretation and growth, planning, active coping, suppression of activities, humor, seeking social support for instrumental reasons and acceptance would be positively associated with the cognitive component of wisdom.
Numerous positive correlations were anticipated due to the broad nature of cognitive dimension of wisdom, which entails a comprehensive understanding of life as a whole. Therefore, it was expected that a person rich in the cognitive dimension of wisdom would demonstrate knowledge and experience regarding all the above stated manners of coping.

Table 4

*Predicted Relationships between the Cognitive Dimension of Wisdom and the Coping Strategies*

<table>
<thead>
<tr>
<th>Positive Correlation</th>
<th>Negative Correlation</th>
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<tbody>
<tr>
<td>Positive reinterpretation and growth</td>
<td>Denial</td>
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<tr>
<td>Acceptance</td>
<td>Behavioral disengagement</td>
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<tr>
<td>Active coping</td>
<td>Mental disengagement</td>
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<tr>
<td>Planning</td>
<td>Substance use</td>
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<tr>
<td>Suppression of competing activities</td>
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<td>Seeking social support for instrumental reasons</td>
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<td>Humor</td>
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The ways of coping predicted to be positively correlated require an individual to strategize, concentrate, plan, think hard about problems and their solutions and accepting and living with the hard realities of life. Practice of such coping strategies is likely to cause improvement in the cognitive skills of an individual (Ardelt, 1998). On the other hand, behavioral disengagement, mental disengagement, denial and substance use were predicted to be negatively associated with the cognitive aspect of wisdom. These predictions are summarized in Table 4.

Critical life experiences were found to be positively correlated to active coping and planning (Kanwar, 2013). However, the cognitive component of wisdom has a very large scope and critical life experiences, only form a small part of it (Ardelt, 2011). A prediction was still
It has been stated earlier that learning from life experiences is one of the main characteristics of wise individuals. This is also one of the four items in the sub-scale of positive reinterpretation and growth (Carver et al., 1989). Learning something new requires cognitive skills and these skills develop further during this learning process. Therefore, it was predicted that coping with the help of positive reinterpretation and growth would lead to the development of the cognitive dimension of wisdom.

Suppression of competing activities involves a cognitive task of focusing one’s attention on the stressor and avoiding any kind of distraction at the same time. Therefore, it is likely to result in the development of the cognitive aspect of wisdom.

Humor helps one to deviate from negative emotions, generated by the stressor and then focus one’s attention on examining the stressful situation, as a result of which the accessible resources can be effectively used to deal with the problem at hand (Wu & Chan, 2013). Because the cognitive dimension of wisdom includes the ability to understand a situation thoroughly (Ardelt, 2004), it was predicted that use of humor in coping with stress would predict wisdom and the cognitive aspect of wisdom in particular.

Seeking information, assistance or advice from friends, family or any organ of the community comes under coping strategy of seeking social support for instrumental reasons (Carver et al., 1989). In other words, it involves seeking advice from others, learning about their experiences, and learning more about the problematic situation. These activities require cognitive understanding and engaging into such a practice is likely to enhance one’s cognitive ability.
Hence a prediction that coping with the help of instrumental support will lead to the development of cognitive wisdom was made.

As stated earlier, acceptance of both positive and negative aspects of human nature and existence is one of the characteristics of wise individual (Ardelt, 2005), it can be interpreted that this ability is related to the cognitive component of wisdom because it requires one to recognize the positive and negative aspects separately which in itself is a cognitive task. Therefore, coping with acceptance was predicted to cause the development of cognitive dimension of wisdom.

Coping using behavioral disengagement was found to be negatively correlated to the overall wisdom score (Kanwar, 2013). This demonstrates that giving up on efforts to reach a goal or giving up on solving a problem are not the characteristics of a wise individual. Making efforts to reach a goal or solving a problem one faces helps in the development of certain cognitive skills and not engaging in such activities may hinder this kind of development. Therefore, coping with behavioral disengagement was predicted to have a negative correlation specifically with the cognitive dimension of wisdom.

It has been discussed earlier in the paper that use of mental disengagement for coping deteriorates one's cognitive ability. Based on the same information, a prediction that mental disengagement would be negatively correlated with the cognitive dimension of wisdom was made.

Use of substances on a regular basis results into cognitive deficits which later on makes it difficult for the users to initiate sustained abstinence (Gould, 2010) Several studies have indicated that drug addicts experience an extensive alteration in their cognitive functioning and many of them also suffer severe cognitive impairments (Nyberg, 2012).
Hence it can be concluded that using substances to think less about a problem or crisis is likely to impair one's cognitive ability. Therefore, a prediction that using substances for coping with stressful life events will have a negative correlation with the development of cognitive dimension of wisdom was made.

Ardelt (2004) explained that cognitive aspect of wisdom involves a desire to know the truth or reality and an acceptance of positive and negative aspects of human nature and life. Denial on the other hand, involves a refusal of reality or refusing to believe that a stressor exists. Therefore, it was predicted that both of them are going to have negative correlation with each other.

The remaining coping strategies such as restraint coping, seeking social support for emotional reasons, turning to religion and focusing on venting of emotions may or may not have a correlation with the cognitive dimension of wisdom. No prediction between these coping styles and cognitive dimension of wisdom was made wisdom due to the lack of existing empirical research.

Research Question 3: What is the relationship between coping strategies and the reflective dimension of wisdom?

Hypothesis 3: The reflective dimension of wisdom entails the ability to perceive reality by overcoming several distortions or illusions. A person learns this ability by practicing looking at things from various perspectives and gaining more insight and self-awareness (Ardelt, 2003). The reflective dimension is also a prerequisite for the development of cognitive and affective dimensions of wisdom according to Ardelt (2003).

Table 5
Predicted Relationships between the Reflective Dimension of Wisdom and the Coping Strategies

<table>
<thead>
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It was predicted that coping strategies such as positive reinterpretation & growth, acceptance, seeking social support for emotional reasons, seeking social support for instrumental reasons, active coping, planning and humor will be positively correlated with the reflective element of wisdom. On the other hand, denial and mental disengagement were predicted to be negatively related with the reflective aspect of wisdom because both of them seem to hinder reflection of one’s thoughts and experiences. These predictions are summarized in Table 5.

The coping strategies mentioned to have a positive correlation, requires one to look at problems and situations from a different perspective, figure out how the consequences can be good in some ways, learning other people’s opinions about a problem, discussing and understanding one’s feelings and emotions and accepting and living with the hard realities of life. Practicing coping in this manner is likely to make one more insightful and aware about oneself and the environment which is significant from the reflective point of view of wisdom.

Reflection gives rise to self-awareness and denial leads to avoidance of reality and the self. This was demonstrated by a negative correlation between denial and reflection and
Wisdom and Coping in College Students

Wisdom and Coping in College Students

reminiscence component of wisdom (Kanwar, 2013). A significant correlation was found between reminiscence and life reflection component of wisdom with active coping, positive reframing, planning, acceptance, self-blame, instrumental support and emotional support (Kanwar, 2013).

One of the items under positive reinterpretation and growth coping strategy is seeing things in a different light, to make it seem more positive (Carver et al., 1989). Kramer (1990) postulated that most of the times, crisis and conflicts can only be resolved when one looks at the problem from a different point of view. Such change in perception fosters reflective thinking as one becomes more self-aware of one’s projections or outlooks (Ardelt, 1998). This causes a reduction or elimination of some specific outlooks which decreases one’s self-centeredness and in the process, makes the individual more mature and well-integrated in personality (Kramer, 1990). Based on this information, it was hypothesized that positive reinterpretation and growth will be positively correlated with the reflective dimension of wisdom.

Coping with humor promotes the finding of new and positive perceptions of a stressful situation as well as helps an individual in distancing himself or herself from the stressor (Kuiper et al., 1995). Fray (1995) found that women with high sense of humor have the ability of reappraising stressful life events and perceive them as a challenge or an opportunity for personal growth. The reflective aspect of wisdom includes the ability to look at the events or phenomena from a new perspective (Ardelt, 2004), therefore it was predicted that coping with humor is likely to develop reflective wisdom related skills in an individual.

Like previously stated, denial includes refusing to believe that something stressful has happened or assuming that the stressor isn’t real (Carver et al., 1989). This clearly requires an attempt to block or suppress the memory related to the stressor. Thus, it was predicted that
coping through denial would be negatively correlated with the reflective dimension of wisdom since the latter requires an individual to reflect on his or her memories or past experiences. In addition, Kanwar (2013) found a negative correlation between denial and reminiscence and life reflection component of Webster's Self-Assessed Wisdom Scale (SAWS).

Mental disengagement was predicted to have a negative correlation with the reflective dimension of wisdom because it involves taking the focus away from negative emotions that are unpleasant for the individual. Also, the items under the subscale (Carver et al., 1989) of mental disengagement are directed towards thinking less about the stressful event, which seems like an effort to avoid reflecting on past stressful experiences one has suffered.

No predictions about the correlation of coping strategies such as suppression of competing activities, restraint coping, substance use, focusing on venting of emotions, behavioral disengagement and turning to religion with the reflective dimension of wisdom were made.

Research Question 4: What is the relationship between coping strategies and the affective dimension of wisdom?

Hypothesis 4: The affective dimension of wisdom (Ardelt, 2003) entails an individual to have positive emotions and conduct towards other people. It also requires the absence of negative or apathetic behavior. Such a behavior arises with a fall of subjectivity and self-centeredness in a person when he or she gains a better understanding of human behavior and learns how to sympathize with others (Ardelt, 2000b; Csikszentmihalyi & Nakamura, 2005; Levitt, 1999, Pascual-Leone, 1990).

It was predicted that acceptance, positive reinterpretation & growth and seeking social support for emotional reasons will be positively correlated with the affective component of wisdom because these strategies seem to include compassion generating activities such as seeing
others positively, accepting others the way they are and sharing emotional comfort with other people. On the other hand, denial and focus on venting of emotions were expected to be negatively associated with the affective aspect of wisdom as they seem to include either not addressing one’s emotional needs or letting negative emotions foster.

The correlation between the affective dimension of wisdom with the remaining coping strategies such as planning, active coping, restraint coping, suppression of competing activities, humor, seeking social support for instrumental reasons, substance use, turning to religion, behavioral disengagement, mental disengagement and denial was left open for exploration in this study. These predictions are summarized in Table 6 below.

Table 6

*Predicted Relationships between the Affective Dimension of Wisdom and the Coping Strategies*

<table>
<thead>
<tr>
<th>Positive Correlation</th>
<th>Negative Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive reinterpretation and growth</td>
<td>Denial</td>
</tr>
<tr>
<td>Seeking social support for emotional reasons</td>
<td>Focus on and venting of emotions</td>
</tr>
<tr>
<td>Acceptance</td>
<td></td>
</tr>
</tbody>
</table>

As mentioned earlier, positive reinterpretation and growth involves seeing things from a different perspective or from somebody else’s point of view and growing after learning from certain experiences (Carver et al., 1989). One of these practices is likely to develop a sense of empathy and the other practice may include becoming a better and more compassionate individual. Hence it can be stated that coping with the help of positive reinterpretation and growth is likely to develop the two main elements of the affective dimension of wisdom which are compassion and empathy.
Receiving sympathy, sense of understanding or moral support from the social environment comes under the coping strategy of seeking social support for emotional reasons (Carver et al., 1989). This involves a lot of interaction with other people about one’s stressful experiences, and simultaneously receiving emotional care or comfort from one’s social environment. Both these practices can generate compassion and empathy in an individual, the main elements of the affective dimension of wisdom. Hence it was predicted that coping by way of seeking emotional support will be positively correlated with the affective dimension of wisdom.

Coping with the help of acceptance focuses mainly on the idea of accepting the reality of a situation and the fact that it has occurred or happened to an individual (Carver et al., 1989). This acceptance towards situations or events also includes the acceptance of other people who may be causing the occurrence of such a situation. Hence it was predicted that more acceptance of other people is likely to result into the development of affective dimension of wisdom.

Unlike acceptance, denial involves refusing to believe in the occurrence of an incident or the reality of a specific situation. This refusal may also include denial of certain individuals who are part of the stressful situation or who cause or trigger the stressful situation. Hence it was predicted that coping strategy which involves denying the existence of other people is likely to have a negative correlation with the affective dimension of wisdom.

The predisposition to focus on one’s experience of distress and then to ventilate the feelings that come out of it is described as focusing and venting of emotions (Scheff, 1979). There is evidence which demonstrates that using social support as an outlet for ventilation of one’s feelings may not be very adaptive on several occasions (Billings & Moos, 1984; Berman & Turk, 1981; Tolor & Fehon, 1987). It is considered functional if the person uses certain amount of time to mourn and to accommodate for his or her loss and then move on from it, but focusing
on these emotions for longer periods can hinder adjustment (Felton, Revenson, & Hinrichsen, 1984).

Likewise, the unique phenomenology of distress is such that simply focusing on it aggravates further distress (Scheier & Carver, 1977). Because venting of emotions results in getting stuck on distressing feelings and causes hindrance in the process of adjusting and moving on, it appears to contradict the self-transcendence aspect of wisdom laid down by Orwoll and Perlumutter (1990). Since the focus here is on the distressing emotions one experiences; it was predicted that negative correlation would occur particularly with the affective dimension of wisdom.

Method

Participants

Participants were recruited from Eastern Illinois University’s Psychology department subject pool (Introductory Psychology (PSY 1890) students), and from upper level Psychology courses offered during the Spring semester 2016. In total, one hundred and eighty-two students took part in the research. Of the 182 participants, 168 students completed all the scale items in the survey. From this sample, 5% \( (n = 8) \) were excluded due to unusually short or long duration of responding (less than 6 minutes, or more than one hour). None out of the remaining participants gave problematic responses (i.e., answering all items with “number 5”). The final total of 160 participants met the minimum sample size requirement of 157 participants to achieve desired power of .90 with an anticipated medium effect size to perform each multiple regression at an alpha level of .05.

The final sample consisted of 29 males (18%) and 131 females (82%), with an age range of 18 to 67 \( (M = 22.82, Mdn = 21) \). There were 7% freshmen, 16% sophomore, 36% juniors and
41% seniors. The sample consisted of 69% White/Caucasian (n = 110), 22% Black/African American (n = 35), 4% Hispanic (n = 7), 3% Asian American (n = 4) and 2% Multi-ethnic (n = 4).

**Materials**

**COPE Scale.** The COPE (Carver, Scheier, & Weintraub, 1989) is a scale intended to measure various ways in which people deal with stress. Respondents are asked to think about the ways or behaviors they generally use for coping with stressful life situations. Their responses are recorded on a 4-point Likert scale with 1 being "I usually don't do this at all", 2 being "I usually do this a little bit", 3 being "I usually do this a medium amount" and 4 being "I usually do this a lot". The COPE has 15 subscales, each representing a different coping strategy that is employed to deal with stress. Each subscale has 4 items and the entire scale comprises of a total of 60 items.

The 15 subscales are: positive reinterpretation and growth ("I look for something good in what is happening"), planning ("I try to come up with a strategy about what to do"), mental disengagement ("I go to movies or watch TV, to think about it less"), restraint coping ("I force myself to wait for the right time to do something"), focus on and venting of emotions ("I get upset and let my emotions out"), use of instrumental social support ("I ask people who have had similar experiences what they did"), active coping ("I take additional action to try to get rid of the problem"), substance use ("I drink alcohol or take drugs, in order to think about it less"), denial ("I refuse to believe that it has happened"), acceptance ("I accept that this has happened and that it cannot be changed"), turning to religion ("I seek God's help"), behavioral disengagement ("I give up the attempt to get what I want"), use of emotional social support ("I
talk to someone about how I feel”), suppression of competing activities (“I put aside other activities in order to concentrate upon this”) and humor (“I laugh about the situation”).

All the subscales are scored individually and a higher score represents a greater use of the specific coping strategy. There is no overall score on the COPE, and no particular way of developing a dominant coping style for a person has been specified (Carver, 2007). Carver et al. (1989) examined the original COPE scale for internal consistency and discovered that the Cronbach’s alpha reliability coefficients for each scale were higher than .6 with only one exception (mental disengagement with .45).

In total, the Cronbach’s alpha for the subscales ranges from .45 to .92. The COPE scale was also found to be relatively stable after analyzing the test-retest correlations that range from .46 to .86 (Carver et. al., 1989). A range of .19 to .95 was established for the item loadings on each factor after an exploratory factor analysis of the original COPE scale was conducted. The subscale of Positive Reinterpretation and Growth (.19) had the weakest item loading, while the items under the subscale of Turning to Religion had the strongest loadings (.88 and .95) in this factor analysis.

Humor was added to the COPE as the 15th subscale following a study by Carver et al. (1989), but was not tested for validity and reliability. Although reliability and validity of the brief COPE scale was analyzed by Bacanli, Surucu & Ilhan (2013), in which humor had the highest internal consistency coefficient of 0.92 and the two items of humor reported very strong factor loadings (.96 and .95).

Correlations among the subscales were also studied to further assess the reliability of the COPE. Most of the correlations were found to be low (from .00 to .45), showing a distinctness among the subscales except Active Coping which was found to be moderately correlated with
Planning (.67), and Seeking Emotional Social Support was also moderately correlated with Seeking Instrumental Social Support (.69) (Carver et al., 1989). The original COPE scales were correlated with certain personality measures in order to establish discriminant and convergent validity. The pattern of associations agreed with what was hypothesized. It was concluded that the original COPE is reliable and valid enough for purpose of investigating coping skills, based on the psychometric findings of Carver, Scheier, and Weintraub (1989).

**Three-Dimensional Wisdom Scale.** Wisdom was measured using Ardelt’s (2003) Three-Dimensional Wisdom Scale (3D-WS), in which wisdom as a variable is considered to potentially contain three dimensions: cognitive, reflective, and affective. The 3D-WS is a 39-item self-report survey which assesses the participants on a 5-point rating scale, asking them about how strongly they agree or disagree to a statement or how true a certain statement is of themselves.

Fourteen items of the cognitive subscale assess the participant’s interest in understanding life and people, and a desire to know the truth (e.g., “It is better not to know too much about things that cannot be changed”, “Ignorance is bliss”, “There is only one right way to do anything”, “People are either good or bad”)

The 12-item reflective subscale assesses the ability of a person to look at things with different perspectives, without getting affected by projections and subjectivity (e.g., “I always try to look at all sides of a problem”, “I sometimes find it difficult to see things from another person’s point of view”, “Things often go wrong for me by no fault of my own”, “When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information”)

The 13-item affective subscale of wisdom assesses the participant’s positive emotions and behaviors towards other people (e.g., “I am annoyed by unhappy people who just feel sorry for
themselves”, “Sometimes I feel a real compassion for everyone”, “It’s not really my problem if others are in trouble and need help”, “If I see people in need, I try to help them one way or another”).

All items that negatively assess the presence of cognitive, reflective, and affective wisdom characteristics are reversed. And then the arithmetic mean of the items for each dimension of wisdom is computed. These computation results are treated as individual scores for the three dimensions. An overall wisdom score is obtained by adding the arithmetic mean of the three dimensions of wisdom. Ardelt (2003) assessed the psychometric properties of the 3D-WS in a sample of 180 older adults having an age range of 52 to 87.

The factor analysis of the 3D-WS revealed that the item loadings ranged from .5 to .8 and the correlation between the three dimensions of wisdom ranged from .3 to .8, which supported the idea that wisdom is one multidimensional concept. Wisdom nominees scored significantly higher than the non-nominees, demonstrating good validity of the scale. Cronbach’s alpha for the entire scale was .86 and it ranged from .71 to .85 for the three dimensions, showing internal consistency and lastly the 3D-WS also has a good test-retest reliability ($r = .85$ at 10 months).

**Procedure**

Participants were administered the aforementioned scales through the online data collection system Qualtrics. The scales were presented to them after they gave consent and completed a demographic questionnaire. The administration of these scales was counterbalanced to control for order effects. After completion of scales and required documents, participants were debriefed and thanked for their time and participation. Most participant completed the study within 45 minutes.
Results

**Internal Consistency Analyses of Scales**

Cronbach’s alpha coefficients were computed to assess the internal consistency of each scale and subscale for the sample. The values demonstrated good to excellent internal consistency (_ > .8 – good and _ > .9 – excellent; George & Mallery, 2003) in some areas (overall wisdom score, strategies under the COPE such as religious coping, denial, planning, emotional social support and substance use) and acceptable level of internal consistency (_ > .7 – acceptable, George & Mallery, 2003) in most of the measured variables (cognitive, reflective and affective dimensions of wisdom; strategies under the COPE such as positive reinterpretation, venting of emotions, instrumental social support, behavioral disengagement).

However, Cronbach’s alpha values were questionable (_ < .6 – questionable, George & Mallery, 2003) in a few (active coping, humor, restraint coping and acceptance) and poor to unacceptable (_ > .5 – poor, _ < .5 – unacceptable, George & Mallery, 2003) in only two variables (suppression of competing activities and mental disengagement). These are presented in Table 7. Many of the Cronbach’s alpha values for the scales as well as the subscales were comparable to those reported in previous studies (Ardelt, 2003; Carver et al., 1989).

**Characteristics of the Study Sample**

Mean scores and standard deviations for the Three-Dimensional Wisdom Scale (3D-WS) and the COPE scale can be found in Table 7. The participants had moderate scores on all three dimensions of wisdom as well as on overall wisdom. For the latter, the sample mean and standard deviation were _M = 133.59 and _SD = 17.97 on a scale of 39 to 195. Results varied for each dimension of wisdom. For the cognitive dimension of wisdom, the participants had _M = 47.64 with _SD = 8.08 on a range of 14 to 70. For reflective dimension of wisdom, _M = 41.55
with $SD = 6.90$ on a range of 12 to 60. Lastly, on the affective dimension of wisdom, the sample had $M = 44.39$ with $SD = 6.73$ on a range of 13 to 65.

The mid-ranged levels of wisdom exhibited by the participants indicate that they are neither very high nor low on cognitive, reflective and affective wisdom. These outcomes were comparable to Ardelt's (2003) study sample that had a mean and standard deviation of $M = 48.16$ and $SD = 7.84$ on the cognitive dimension, $M = 45.84$ and $SD = 5.88$ on the reflective dimension and, $M = 46.8$ and $SD = 6.5$ on the affective dimension of wisdom Ardelt (2003).

There was some level of variance in the manner of coping, as few coping strategies were common yet some appeared to be less common among the participants. Out of the 15 coping strategies, the most frequently used ones were positive reinterpretation and growth with a mean and standard deviation of $M = 12.64$ and, $SD = 2.57$; planning with $M = 12.08$ and $SD = 2.76$; instrumental social support with $M = 11.61$ and $SD = 2.95$; emotional social support with $M = 11.42$ and $SD = 3.35$; active coping with $M = 11.35$ and $SD = 2.34$ and; acceptance with $M = 11.27$ and $SD = 2.38$. The strategies that were rarely used by the study participants were substance use with $M = 6.43$ and $SD = 3.22$; denial with $M = 6.81$ and $SD = 2.83$ and; behavioral disengagement with $M = 6.83$ and $SD = 2.62$.

Moderately used coping strategies by the study participants were mental disengagement with $M = 10.27$ and $SD = 2.50$; venting of emotions with $M = 10.43$ and $SD = 2.97$; religious coping with $M = 10.03$ and $SD = 3.62$; humor with $M = 9.85$ and $SD = 2.76$; restraint coping with $M = 10.33$ and $SD = 2.47$ and; suppression of competing activities with $M = 10.13$ and $SD = 2.23$. All these coping strategies had a scale range of 4 to 16, where 4 means that the coping strategy is not used at all and 16 means that the strategy is being used a lot.
The results are comparable to the study that was conducted to test the psychometric properties of the COPE Scale using a sample of 1,030 undergraduate students (Carver et al., 1989). The mean values from that study sample are similar to the mean values of the current study sample indicating that the set of coping strategies that were frequently used by respondents of the Carver’s study are also a frequent choice of the participants of the current study.

Table 7

*Means, Standard Deviations and Cronbach’s Alphas (N = 160)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Scale Range</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisdom</td>
<td>133.59</td>
<td>17.97</td>
<td>39 – 195</td>
<td>.87</td>
</tr>
<tr>
<td>Cognitive Wisdom</td>
<td>47.64</td>
<td>8.08</td>
<td>14 – 70</td>
<td>.77</td>
</tr>
<tr>
<td>Reflective wisdom</td>
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<td>.75</td>
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<tr>
<td>Affective Wisdom</td>
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<td>6.73</td>
<td>13 – 65</td>
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<td>COPE</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Positive Reinterpretation &amp;</td>
<td>12.64</td>
<td>2.57</td>
<td>4 – 16</td>
<td>.77</td>
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<td>Growth</td>
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<td></td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>10.27</td>
<td>2.50</td>
<td>4 – 16</td>
<td>.46</td>
</tr>
<tr>
<td>Venting of Emotions</td>
<td>10.43</td>
<td>2.97</td>
<td>4 – 16</td>
<td>.75</td>
</tr>
<tr>
<td>Instrumental Social Support</td>
<td>11.61</td>
<td>2.95</td>
<td>4 – 16</td>
<td>.77</td>
</tr>
<tr>
<td>Active Coping</td>
<td>11.35</td>
<td>2.34</td>
<td>4 – 16</td>
<td>.61</td>
</tr>
<tr>
<td>Denial</td>
<td>6.81</td>
<td>2.83</td>
<td>4 – 16</td>
<td>.80</td>
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<tr>
<td>Religious Coping</td>
<td>10.03</td>
<td>3.62</td>
<td>4 – 16</td>
<td>.82</td>
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<tr>
<td>Humor</td>
<td>9.85</td>
<td>2.76</td>
<td>4 – 16</td>
<td>.61</td>
</tr>
<tr>
<td>Behavioral Disengagement</td>
<td>6.83</td>
<td>2.62</td>
<td>4 – 16</td>
<td>.77</td>
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</tbody>
</table>
Bivariate Correlations in the Dimensions of Wisdom

The study questions inquired about the association of the 15 coping strategies with the construct of wisdom (total wisdom score) and each of these three dimensions. Before examining those relationships, the correlation of the three dimensions of wisdom were examined followed by the correlation amongst the 15 coping strategies. All correlations between each of the dimensions of wisdom and its overall construct were statistically significant and are shown in the Table 8 below.

Table 8
Zero-Order Correlations Amongst Wisdom and its Dimensions (N = 160)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cognitive</th>
<th>Reflective</th>
<th>Affective</th>
<th>Overall Wisdom</th>
</tr>
</thead>
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<tr>
<td>Cognitive</td>
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<td>.55***</td>
<td>.50***</td>
<td>.85***</td>
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<tr>
<td>Reflective</td>
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<td>--</td>
<td>.53***</td>
<td>.83***</td>
</tr>
<tr>
<td>Affective</td>
<td>.50***</td>
<td>.53***</td>
<td>--</td>
<td>.80***</td>
</tr>
<tr>
<td>Overall Wisdom</td>
<td>.85***</td>
<td>.83***</td>
<td>.80***</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001
Overall wisdom showed a very strong positive correlation with the cognitive, reflective and affective dimensions of wisdom indicating that overall wisdom constitutes all three dimensions within its construct. The three dimensions of wisdom were found to have moderate positive correlations suggesting that they are similar to each other but not necessarily the same thing. This information also implies that cognitive, reflective and affective dimensions are three different characteristics of the same construct.

**Bivariate Correlations Amongst the Coping Strategies**

In the correlational analyses conducted for the 15 coping strategies listed under the COPE scale few were determined to have moderate and strong correlations (See Table 9). For example, emotional social support had a strong positive correlation with instrumental social support \((r = .76)\) and active coping had a strong positive correlation with planning \((r = .74)\).

Additionally, behavioral disengagement had a strong positive correlation with denial \((r = .62)\) as well as with substance use \((r = .64)\). Instrumental social support was removed from subsequent analyses and the variable of emotional social support was kept as a representative of both coping strategies given the strong correlation between them. Similarly, active coping was kept as a representative of active coping as well as planning, while planning was removed before conducting the multiple regression analyses. Lastly, behavioral disengagement was also removed from the list of coping strategies because of its high correlations with denial and substance use. In the end, a total of 12 coping strategies having weak or moderate correlations were kept for the subsequent multiple regression analyses.
Table 9
Zero-Order Correlations Amongst the Coping Strategies of the COPE Scale (N = 160)

<table>
<thead>
<tr>
<th>COPE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<th>10</th>
<th>11</th>
<th>12</th>
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<td>.26***</td>
<td>.20**</td>
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<td>.36***</td>
<td>.24**</td>
<td>.59***</td>
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<td>.34***</td>
<td>.19**</td>
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</tr>
<tr>
<td>PL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001

Note: PRG = Positive Reinterpretation and Growth, MD = Mental Disengagement, FVE = Focus on Venting of Emotions, ISS = Instrumental Social Support, AC = Active Coping, DN = Denial, RLC = Religious Coping, HM = Humor, BD = Behavioral Disengagement, RTC = Restraint Coping, ESS = Emotional Social Support, SU = Substance Use, ACP = Acceptance, SCA = Suppression of Competing Activities, PL = Planning
Research Question 1: Coping Strategies and Overall Wisdom

The first research question investigated the relationship between coping strategies and the overall construct of wisdom. Specifically, it was hypothesized that there would be specific correlations between coping strategies and wisdom as outlined in Table 3 presented earlier.

Table 10

Summary of Multiple Regression Between Coping Strategies and Overall Wisdom (N = 160)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Reinterpretation &amp; Growth</td>
<td>2.66</td>
<td>.60</td>
<td>.38***</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>-.82</td>
<td>.55</td>
<td>-.11</td>
</tr>
<tr>
<td>Focus on Venting of Emotions</td>
<td>-1.25</td>
<td>.49</td>
<td>-.21*</td>
</tr>
<tr>
<td>Active Coping</td>
<td>.66</td>
<td>.73</td>
<td>.09</td>
</tr>
<tr>
<td>Denial</td>
<td>-.119</td>
<td>.55</td>
<td>-.19*</td>
</tr>
<tr>
<td>Religious Coping</td>
<td>.06</td>
<td>.41</td>
<td>.01</td>
</tr>
<tr>
<td>Humor</td>
<td>-.60</td>
<td>.56</td>
<td>-.09</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>-.95</td>
<td>.57</td>
<td>-.01</td>
</tr>
<tr>
<td>Use of Emotional Social Support</td>
<td>.63</td>
<td>.46</td>
<td>.12</td>
</tr>
<tr>
<td>Substance Use</td>
<td>.02</td>
<td>.47</td>
<td>.00</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.29</td>
<td>.57</td>
<td>.04</td>
</tr>
<tr>
<td>Suppression of Competing Activities</td>
<td>-.88</td>
<td>.67</td>
<td>-.11</td>
</tr>
</tbody>
</table>

Note. $R^2 = .36$; adjusted $R^2 = .31$

* $p < .05$, ** $p < .01$, *** $p < .001$

A multiple regression analysis was conducted to determine the extent to which various coping strategies predicted the development of the construct of wisdom in individuals. The
outcomes indicate that the manner of coping accounted for 36% of the overall variance in wisdom construct $F(12, 147) = 6.88, p < .001$. Positive reinterpretation and growth accounted for the largest amount of variance (14%), $p < .001$. The factors of denial and focusing on venting of emotions accounted for 4% variance each, $p < .05$.

The coping strategy of positive reinterpretation and growth had a positive correlation with overall wisdom; while, the variables of denial and focusing on venting of emotions were negatively correlated with the wisdom construct. The correlations between overall wisdom and the rest of the coping strategies were not found to be statistically significant. See Table 10 for a summary of the results.

Tests to examine if there were multicollinearities among the predictors indicated that none of the tolerance index values were lower than .2; likewise, none of the variance inflation factor (VIF) values exceeded 4. The lowest tolerance value of .48 and the highest VIF value of 2.08 were found in active coping. These imply that multicollinearity among the predictors was not present.

**Research Question 2: Coping Strategies and Cognitive Dimension of Wisdom**

The second research question focused on the relationship between coping strategies and the cognitive dimension of wisdom. Specific correlations were hypothesized between the coping strategies and cognitive dimension of wisdom as outlined in Table 4 earlier. A multiple regression analysis was conducted to determine the extent to which the various coping strategies are predictive of the cognitive dimension of wisdom. The results indicate that the manner of coping accounted for 18% of the overall variance in the construct of cognitive dimension of wisdom $F(12, 147) = 2.74, p < .01$. 
Table 11

Summary of Multiple Regression Between Coping Strategies and the Cognitive Dimension of Wisdom (N = 160)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Reinterpretation &amp; Growth</td>
<td>.78</td>
<td>.31</td>
<td>.25*</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>-.51</td>
<td>.28</td>
<td>-.16</td>
</tr>
<tr>
<td>Focus on Venting of Emotions</td>
<td>-.26</td>
<td>.25</td>
<td>-.09</td>
</tr>
<tr>
<td>Active Coping</td>
<td>.22</td>
<td>.37</td>
<td>.06</td>
</tr>
<tr>
<td>Denial</td>
<td>-.37</td>
<td>.28</td>
<td>-.13</td>
</tr>
<tr>
<td>Religious Coping</td>
<td>-.14</td>
<td>.21</td>
<td>-.06</td>
</tr>
<tr>
<td>Humor</td>
<td>.14</td>
<td>.29</td>
<td>.05</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>-.00</td>
<td>.29</td>
<td>.00</td>
</tr>
<tr>
<td>Use of Emotional Social Support</td>
<td>-10</td>
<td>.23</td>
<td>.04</td>
</tr>
<tr>
<td>Substance Use</td>
<td>-.16</td>
<td>.24</td>
<td>-.06</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-.02</td>
<td>.29</td>
<td>-.01</td>
</tr>
<tr>
<td>Suppression of Competing Activities</td>
<td>-.32</td>
<td>.34</td>
<td>-.09</td>
</tr>
</tbody>
</table>

Note. \( R^2 = .18 \); adjusted \( R^2 = .12 \)

* \( p < .05 \), ** \( p < .01 \), *** \( p < .001 \)

A positive correlation was found between the coping strategy of positive reinterpretation and growth and the cognitive dimension of wisdom. This factor accounted for 6% of the variance, \( p < .05 \). No other significant correlations between cognitive dimension of wisdom and the rest of the coping strategies were found in this analysis. See Table 11 for a summary of the results. The multicollinearity tests indicated that all the tolerance and VIF values were within the acceptable range and multicollinearity among the predictors was not present.
Research Question 3: Coping Strategies and Reflective Dimension of Wisdom

The third research question investigated the relationship between coping strategies and the reflective dimension of wisdom. Some correlations between coping strategies and the reflective dimension of wisdom were hypothesized, as enumerated in Table 5 earlier.

Table 12

Summary of Multiple Regression Between Coping Strategies and Reflective Dimension of Wisdom (N = 160)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Reinterpretation &amp; Growth</td>
<td>.93</td>
<td>.21</td>
<td>.35***</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>-.36</td>
<td>.19</td>
<td>-.13</td>
</tr>
<tr>
<td>Focus on Venting of Emotions</td>
<td>-.64</td>
<td>.17</td>
<td>-.28**</td>
</tr>
<tr>
<td>Active Coping</td>
<td>.34</td>
<td>.26</td>
<td>.11</td>
</tr>
<tr>
<td>Denial</td>
<td>-.59</td>
<td>.19</td>
<td>-.23**</td>
</tr>
<tr>
<td>Religious Coping</td>
<td>-.01</td>
<td>.14</td>
<td>.01</td>
</tr>
<tr>
<td>Humor</td>
<td>-.46</td>
<td>.20</td>
<td>-.18*</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>.11</td>
<td>.20</td>
<td>.04</td>
</tr>
<tr>
<td>Use of Emotional Social Support</td>
<td>.16</td>
<td>.16</td>
<td>.08</td>
</tr>
<tr>
<td>Substance Use</td>
<td>.07</td>
<td>.17</td>
<td>.03</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.48</td>
<td>.20</td>
<td>.16*</td>
</tr>
<tr>
<td>Suppression of Competing Activities</td>
<td>-.23</td>
<td>.24</td>
<td>-.07</td>
</tr>
</tbody>
</table>

Note. $R^2 = .46$; adjusted $R^2 = .42$

*p < .05, **p < .01, ***p < .001

A multiple regression analysis was conducted to investigate how various coping strategies are associated with the reflective dimension of wisdom. The outcome indicates that the coping
strategies accounted for 46% of the overall variance in the reflective dimension of wisdom $F(12, 147) = 10.49, p < .001$. Positive reinterpretation and growth accounted for most of the variance (12%), $p < .001$.

The remainder of the variance was explained by focusing on venting of emotions (8%), $p < .001$; denial (5%), $p < .01$; humor (3%), $p < .05$ and; acceptance (3%), $p < .05$. Only positive reinterpretation and growth and acceptance had a positive correlation with the reflective dimension of wisdom. On the other hand, denial, humor and focusing on venting of emotions were negatively correlated with the reflective aspect of wisdom. The correlations between reflective dimension of wisdom and the rest of the coping strategies were not found to be statistically significant. See Table 12 for a summary of the results.

The multicollinearity tests indicated that all the tolerance and VIF values were within the acceptable ranges and multicollinearity among the predictors was not present.

**Research Question 4: Coping Strategies and Affective Dimension of Wisdom**

The fourth research question examined the relationship between coping strategies and the affective dimension of wisdom. Specifically, it was hypothesized that few correlations would exist between the coping strategies and the affective dimension of wisdom as enumerated in Table 6 earlier.

A multiple regression analysis was conducted to determine the relationship between the various coping strategies and the affective dimension of wisdom. The outcome indicates that the manner of coping accounted for 23% of the overall variance in the affective dimension of wisdom $F(12, 147) = 3.67, p < .001$. Positive reinterpretation and growth accounted for most of the variance (13%), $p < .001$. 

Table 13

*Summary of Multiple Regression Between Coping Strategies and the Affective Dimension of Wisdom (N = 160)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Reinterpretation &amp; Growth</td>
<td>.95</td>
<td>.25</td>
<td>.36***</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>.05</td>
<td>.22</td>
<td>.01</td>
</tr>
<tr>
<td>Focus on Venting of Emotions</td>
<td>-.36</td>
<td>.20</td>
<td>-.16</td>
</tr>
<tr>
<td>Active Coping</td>
<td>.10</td>
<td>.30</td>
<td>.04</td>
</tr>
<tr>
<td>Denial</td>
<td>-.26</td>
<td>.22</td>
<td>-.11</td>
</tr>
<tr>
<td>Religious Coping</td>
<td>.19</td>
<td>.17</td>
<td>.10</td>
</tr>
<tr>
<td>Humor</td>
<td>-.28</td>
<td>.23</td>
<td>-.11</td>
</tr>
<tr>
<td>Restraint Coping</td>
<td>-.21</td>
<td>.23</td>
<td>-.08</td>
</tr>
<tr>
<td>Use of Emotional Social Support</td>
<td>.37</td>
<td>.19</td>
<td>.18*</td>
</tr>
<tr>
<td>Substance Use</td>
<td>.10</td>
<td>.19</td>
<td>.05</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-.17</td>
<td>.23</td>
<td>-.06</td>
</tr>
<tr>
<td>Suppression of Competing Activities</td>
<td>-.32</td>
<td>.28</td>
<td>-.11</td>
</tr>
</tbody>
</table>

Note. R² = .23; adjusted R² = .17

*p < .05, **p < .01, ***p < .001

The variable of seeking social support for emotional reasons was found to explain the rest of the variance in the regression analysis (3%). p < .05. Coping with positive reinterpretation and growth and seeking social support for emotional reasons showed positive correlations with the affective dimension of wisdom. No other significant correlations between the affective dimension of wisdom and the rest of the coping strategies were found in this analysis. See Table
13 for a summary of the results. No multicollinearities among the predictors were present given that all the tolerance and VIF values within the acceptable ranges.

**Discussion**

The concept of wisdom as a human characteristic or trait has been studied in philosophy for several centuries. Unlike philosophy, however, the investigation of wisdom as a psychological process has been conducted only in the last few decades. This study aimed at contributing to the existing psychological research in this domain by examining the association of various coping strategies with three dimensions of wisdom: cognitive, reflective and affective. More specifically, the study investigated how several coping strategies predict wisdom and its three dimensions.

**Coping Strategies Predicting Overall Wisdom**

To examine how different ways of coping are associated with wisdom, the current study explored which factors of the COPE were most predictive of the variable of wisdom. Out of all the coping strategies, only positive reinterpretation and growth exhibited a positive correlation with overall wisdom ($p < .001$). This finding is consonant with those obtained in past research (Ardelt, 2005; Kanwar, 2013).

In her qualitative study, Ardelt (2005) established that wise individuals often use learning from life experiences to cope with difficulties of life. Learning from life experiences is one of the items that constituted positive reinterpretation and growth in the COPE scale (Carver et al., 1989). Ardelt (2005), however, also found that wise individuals tend to use mental distancing, active coping and recognition of life uncertainties to cope with difficult life situations. These were not observed in the present study.
The significant positive relationship between positive reinterpretation/growth and wisdom also validates Kanwar’s (2013) findings, as a strong positive correlation was observed between overall wisdom and positive reframing in her quantitative research. Positive reframing is the concise version of positive reinterpretation and growth in the brief COPE scale (Carver, 1997).

This common finding across the three studies suggests that a similar mechanism concerning the development of wisdom could exist across different age groups and diverse cultures around the world. In other words, coping with positive reinterpretation and growth can lead to the development of wisdom in young college students from central region of the United States, as well as in middle-aged people who live in the northern part of India.

Wisdom was also found to be positively correlated with active coping, humor, planning, and acceptance in Kanwar (2013), but not in the present study. The discrepancy in findings is likely due to the differences in study samples and measures of wisdom. The Kanwar (2013) study sample consisted of younger adults, middle aged as well as elderly people from the northern part of India, while the present study sample consisted of university students from a central part of the United States, with a mean age of 23 years.

Positive reframing may be a common facilitator in developing wisdom for younger as well as older individuals, while additional coping strategies such as active coping, planning, humor and acceptance may facilitate wisdom as people grow older. It is also possible, given the cultural differences between the two study samples, that these additional coping strategies foster wisdom in northern Indians but not among mid-Americans.
In the current study, overall wisdom was negatively correlated with focusing on venting of emotions ($p < .05$) and denial ($p < .05$), confirming predictions that were made earlier in the study. These were not observed in Kanwar’s (2013) research, the only existing quantitative study on the relationship between coping and wisdom. Kanwar, however found a negative correlation between wisdom and behavioral disengagement which means that minimizing or giving up on attempting to deal with the stressor is associated with a lack of wisdom.

In Ardelt’s (2005) qualitative study, it was observed that interviewees who scored low on wisdom either engaged in avoidance of reflection, or used passive coping strategies such as acceptance or reliance on God to deal with crisis and obstacles of life. These were not replicated in the present study.

In sum, findings of the present study indicate that as individuals look at a stressor from a different point of view and try to learn something positive out of their experience with the stressful life event, are likely to be wiser overall. Conversely, as people refuse to believe in the existence of a stressor, and as they tend to focus on their experience of distress and engage in venting of feelings that arise out of such an experience, they are likely to be less wise in general.

**Coping Strategies Predicting the Cognitive Dimension of Wisdom**

The cognitive dimension of wisdom pertains to a person’s ability to grasp life in a way that he or she understands the significant and profound meaning of incidences and affairs, particularly with respect to intrapersonal and interpersonal matters (Ardelt, 200b; Chandler & Holiday, 1990; Kekes, 1983; Sternberg, 1990a). This also involves the cognizance of positive as well as negative aspects of human nature, implied limits of knowledge, and acknowledgement of life’s uncertainties (Ardelt, 2003).
It was hypothesized that several coping strategies will have either a positive or a negative association with the cognitive dimension of wisdom. However, a positive correlation of cognitive dimension was only found with positive reinterpretation and growth ($p < .05$), confirming one of those predictions. Looking at a stressor from different point of view and trying to make it seem more positive along with trying to learn something from that experience can facilitate the development of skills that are helpful in comprehending life, and understanding the deeper meaning of its affairs and occurrences.

**Coping Strategies Predicting the Reflective Dimension of Wisdom**

The reflective dimension of wisdom refers to the ability to perceive reality without getting affected by one’s projections and distortions. A person acquires this skill by the practice of looking at things from different point of views, and attaining higher insight and self-awareness (Ardelt, 2003). The reflective dimension of wisdom is also considered as a precondition for the development of cognitive and affective dimensions of wisdom according to Ardelt (2003).

The reflective dimension of wisdom was found to have a significant positive correlation with positive reinterpretation and growth ($p < .01$) and acceptance ($p < .05$). On the other hand, significant inverse correlations were observed between the reflective dimension of wisdom and focusing on venting of emotions ($p < .01$), denial ($p < .01$) and humor ($p < .05$). Individuals who make effort to look at the stressor from different as well as positive point of view and learn to live with what has happened by accepting the reality that it cannot be changed are more likely to possess good insight and ability to reflect upon their experiences.

In contrast, those who focus on their distress and engage in venting of the emotions that arise out of such experience, who refuse to believe in the existence of the stressor and deny the
reality of the situation, and who make fun of the stressor or situation are more likely to avoid reflecting on their experiences and possibly lack insight and self-awareness.

The positive correlations of positive reinterpretation and acceptance with the reflective dimension of wisdom confirm those found in Kanwar’s (2013) correlational study where positive correlations of the reflection and reminiscence component of wisdom with positive reframing and acceptance were observed. The reflection and reminiscence component also had positive correlations with active coping, planning, self-blame, instrumental support and emotional support in Kanwar’s quantitative analysis.

The negative correlations of focusing on venting of emotions and humor with the reflective dimension of wisdom were not found Kanwar’s (2013) study. However, the negative correlation between denial and the reflective dimension of wisdom was also seen in Kanwar’s (2013) research. Both studies establish denial as a robust inverse predictor of the reflective component of wisdom.

Humor was treated as a characteristic of wisdom, and was also established as one of the elements of wisdom in the Self-Assessment Wisdom Scale (SAWS) (Webster, 2003, 2007). The negative correlation of humor with the reflective dimension of wisdom in the current study therefore raises a question about its role in conceptualizing wisdom.

To clarify this perplexity, Webster (2003) explained that not all types of humor contribute to wisdom: teasing, sarcasm and caustic humor may very well fall under the scope of humor, but they are not within the domain of wisdom. On the other hand, the use of humor in recognizing irony, reducing stress and bonding with others are instances when humor falls within the purview of wisdom (Webster, 2007).
A comparison of the items of the humor subscale in COPE (Carver et al., 1989) with the humor items of the Self-Assessment Wisdom Scale (SAWS) (Webster, 2003, 2007) might explain why humor was treated as an element of wisdom in the Self-Assessment Wisdom Scale while a negative correlation between humor and the reflective dimension of wisdom was observed in the present study. Two items of humor from the COPE scale (Carver et al., 1989): “I kid around about it” and “I make fun of the situation”, demonstrate how humor is used to ridicule and avoid the stressor rather than facing it.

In contrast, two of the humor items in the Self-Assessment Wisdom Scale (SAWS) (Webster, 2003, 2007) show how humor can be used to see a stressor from a positive point of view or how it can be used to comfort others and bond with them: “When I face major life transitions I try and find a funny side” and “I often use humor to put other people at ease”.

The positive correlation found in the present study between the reflective dimension of wisdom and acceptance conflicts with the results of Ardelt’s (2005) qualitative analysis where individuals who scored low on wisdom engaged in the coping strategy of acceptance perhaps as a form of passive coping. Perhaps coping with acceptance can take place in two ways.

Firstly, by accepting the existence of a stressor or situation which is beyond one’s control and acknowledging the fact that it cannot be changed and; secondly by giving up on doing something about the stressor and accepting that it is beyond one’s control, even when it is part of a solvable problem. Two of the items from acceptance subscale of the COPE scale are – “I accept that this has happened and that it can't be changed” and “I accept the reality of the fact that it happened” (Carver et al., 1989). These demonstrate how the former way of coping with acceptance is reflected by the COPE scale.
Coping Strategies Predicting the Affective Dimension of Wisdom

The affective dimension of wisdom (Ardelt, 2003) demands an individual to have positive affect and demeanor towards other people. Additionally, it requires the absence of negative or dispassionate behavior. Such a conduct ascends with a fall of prejudice and egocentricity in a person when he or she attains a better understanding of human nature and learns to empathize with others (Ardelt, 2000b; Csikszentmihalyi & Nakamura, 2005; Levitt, 1999, Pascual-Leone, 1990). Significant positive correlations of the affective dimension of wisdom were found with positive reinterpretation and growth \((p < .01)\) as well as with use of emotional social support \((p < .05)\). Both these findings confirmed the correlations that were hypothesized earlier in the study.

These outcomes are consistent with those in Kanwar’s (2013) correlational study if the emotional regulation element of the Self-Assessment Wisdom Scale (SAWS) is analogous to the affective dimension of the Three-Dimensional Wisdom Scale (3D-WS). Kanwar (2013) used the Self-Assessment Wisdom scale (SAWS) for her study and found emotional regulation to be positively correlated with active coping and acceptance.

Summary of Findings

Summing up the findings of the present study involving the affective dimension of wisdom, as individuals try to look at stressors from different points of view and try to learn from that experience or grow as a person because of the experience, and as they receive sympathy, sense of understanding or moral support from their social environment, they are likely to be richer in the affective dimension of wisdom. This implies that these individuals are likely to have positive emotions and conduct towards other people and they tend to demonstrate low level of subjectivity and self-centeredness in their behavior.
It is important to note that among all the coping strategies examined in the present study, positive reinterpretation and growth was found to be predictive not only of wisdom as an overall construct, but also of each of the three dimensions of wisdom. Relative to the other coping strategies, this predictor accounted for most of the variance in wisdom and its dimensions: overall wisdom – 14% variance; cognitive wisdom – 6% variance; reflective wisdom – 12% variance and; affective wisdom – 13% variance. Additionally, similar relationships between positive reinterpretation/grown and wisdom were observed in the Ardelt (2003) and Kanwar studies (2013) despite the differences in study design, and measures used. This indicates that coping with the help of positive reinterpretation and growth is undoubtedly the most robust predictor of wisdom.

Clinical Implications

As previously stated, there is very limited existing literature that examines the relationship between coping strategies and wisdom. Additionally, this relationship has never been investigated using the three-dimensional wisdom model and the complete version of the COPE scale. In examining wisdom at the level of its dimensions using quantitative measures, the present study contributes to the existing literature by extending those conducted by Ardelt (2003) and Kanwar (2013). The study outcomes help us understand how the manner of coping used by individuals in difficult life situations serves as a tool for human development and the attainment of wisdom. Wisdom entails the knowledge of coping well with life problems, so determining what coping strategies are commonly being used by wise people is significant information for therapeutic purposes.

As indicated by the study results, positive reinterpretation and growth as a coping strategy was most predictive of wisdom in general, and of each of the three dimensions of
wisdom. Furthermore, acceptance and seeking emotional social support are shown to enhance reflective and affective abilities pertaining to wisdom. This information can be utilized by clinicians in their therapeutic practice as well as by people in general who aspire to become wise.

The cornerstone of most therapeutic interventions is assisting the client to learn new coping skills to deal with the stressors or difficulties of life. Clinicians can utilize the findings of the current study to the fullest by encouraging clients to look at the problem or stressor from a different point of view, and try to learn something positive out of the experience; by teaching them ways of accepting the reality of certain stressors that cannot be changed and; by encouraging them to develop a social support system, so that they receive sympathy and sense of understanding from their friends and family members. Taking all these steps can assist the clients to cope with stressors more effectively and is likely to facilitate the development of wisdom in them.

In contrast, clinicians can prompt their clients to not use ways of coping that are shown to hinder the development of wisdom. This entails making sure that the clients do not engage in excessive ventilation of their negative feelings; that they do not go into complete denial of their current stressful situation and; that they take the stressor seriously and not simply kid around about the situation.

Wisdom as a human characteristic is highly revered because it makes an individual sagacious, mature, perspicacious, and gives one the ability to make expeditious use of information along with better reasoning and decision making skills. Becoming wise is clearly an essential part of one's life as there are several benefits attached to it.

Training programs to improve emotional intelligence which is another essential human attribute have been introduced in the fields of education and business (Cobb & Mayer, 2000;
Kunnanatt, 2004; Massari, 2011). Development of similar programs should be encouraged to improve wisdom among people in general or in specific fields like business and education given the benefits reported.

**Limitations and Future Directions**

This study has limitations regarding its external validity. Firstly, the sample size \( (N = 160) \) was relatively small. While an a priori power analysis showed that a minimum of 157 participants is required for each of the multiple regression analyses to be statistically significant, a larger sample size would have ensured greater external validity.

Secondly, due to the self-reported measures used in the study there is a likelihood that participants might have engaged in socially desirable responding. The scales rely on recollection and memories may or may not be accurate. In addition, the response times documented exhibited wide variation; while most of the participants took 6 to 24 minutes to complete all the responses, some took more than 2 hours.

The study is primarily correlational in nature. Deducing whether coping causes the development of wisdom, or presence of wisdom gives rise to effective coping skills is difficult. Future research that is more experimental in approach is required to establish the causal relationships between coping and wisdom. Some discrepancies with the previous research were also observed. Replication is necessary to determine whether the inconsistencies were due to differences in sample characteristics and measures used.

One noticeable limitation was that the study sample consisted of 160 undergraduate college students from the central part of the United States with a mean age of merely 23 years. There was an extremely large proportion of female participants (82%) and the sample certainly lacked cultural diversity as 69% of the participants were Caucasian. The results of this study
might apply to young female Caucasian participants, but they may not be representative of wisdom-related characteristics of a culturally different population like elderly Asian males.

It is recommended that a bigger sample should be obtained while taking into account cultural background, age, and other demographic factors that have a bearing on the variables being examined (e.g., education level).

Conclusion

Becoming wise is an essential part of one’s life. Not only does one become more mature, sagacious, perspicacious and companionate with wisdom, it also offers the ability to cope effectively with difficulties of life. This study focused on understanding the relationship between coping and wisdom by introducing various coping strategies as potential predictors of wisdom and its dimensions: cognitive, reflective and affective.

The results of the study seem to suggest that use of coping strategies such as positive reinterpretation and growth, acceptance and emotional social support lead towards the development of wisdom in college students. Out of all the coping strategies examined, positive reinterpretation and growth stood out to be the most robust predictor of wisdom in general and of each of its dimensions. In contrast, use of coping strategies such as denial, venting of emotions and humor signal a lack of wisdom. This study contributes to the existing psychological literature on wisdom by exploring its relationship with other psychological processes such as coping.
References


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Appendix A

Demographics Questionnaire

Instructions: Please provide a response to the following statements.

1. Age: __________

2. Gender: Male or Female

3. Ethnicity:
   _____ White/Caucasian
   _____ Black/African-American
   _____ Hispanic
   _____ Native American
   _____ Asian American
   _____ Hawaiian or Pacific Islander
   _____ Multi-ethnic
   _____ Other

4. Year in School
   _____ Freshman
   _____ Sophomore
   _____ Junior
   _____ Senior
Graduate

5. Academic Major: _____________________
Appendix B

COPE Scale

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

1 = I usually don’t do this at all
2 = I usually do this a little bit
3 = I usually do this a medium amount
4 = I usually do this a lot

1) I try to grow as a person as a result of the experience.
2) I turn to work on other substitute activities to take my mind off things.
3) I get upset and let my emotions out.
4) I try to get advice from someone about what to do.
5) I concentrate my efforts on doing something about it.
6) I say to myself “this isn’t real”.
7) I put my trust in God.
8) I laugh about the situation.
9) I admit to myself that I can’t deal with it, and quit trying.
10) I restrain myself from doing anything too quickly.
11) I discuss my feelings with someone.
12) I use alcohol or drugs to make myself feel better.
13) I get used to the idea that it happened.
14) I talk to someone to find out more about the situation.
15) I keep myself from getting distracted by other thoughts or activities.
16) I daydream about things other than this.
17) I get upset, and am really aware of it.
18) I seek God’s help.
19) I make a plan of action.
20) I make jokes about it.
21) I accept that this has happened and that it can’t be changed.
22) I hold off doing anything about it until the situation permits.
23) I try to get emotional support from friends or relatives.
24) I just give up trying to reach my goal.
25) I take additional action to try to get rid of the problem.
26) I try to lose myself for a while by drinking alcohol or taking drugs.
27) I refuse to believe that it happened.
28) I let my feelings out.
29) I try to see it in a different light, to make it seem more positive.
30) I talk to someone who could do something concrete about the problem.
31) I sleep more than usual.
32) I try to come up with a strategy about what to do.
33) I focus on dealing with this problem, and if necessary let other things slide a little.
34) I get sympathy and understanding from someone.

35) I drink alcohol or take drugs, in order to think about it less.

36) I kid around about it.

37) I give up the attempt to get what I want.

38) I look for something good in what is happening.

39) I think about how I might best handle the problem.

40) I pretend that it hasn’t really happened.

41) I make sure not to make matters worse by acting too soon.

42) I try hard to prevent other things from interfering with my efforts at dealing with this.

43) I go to movies or watch TV, to think about it less.

44) I accept the reality of the fact that it happened.

45) I ask people who have had similar experiences what they did.

46) I feel a lot of emotional distress and I find myself expressing those feelings a lot.

47) I take direct action to get around the problem.

48) I try to find comfort in my religion.

49) I force myself to wait for the right time to do something.

50) I make fun of the situation.

51) I reduce the amount of effort I’m putting into solving the problem.

52) I talk to someone about how I feel.

53) I use alcohol or drugs to help me get through it.

54) I learn to live with it.

55) I put aside other activities in order to concentrate on this.

56) I think hard about what steps to take.
57) I act as though it hasn’t even happened.

58) I do what has to be done, one step at a time.

59) I learn something from the experience.

60) I pray more than usual.

Scales (sum items listed, with no reversals of coding):

Positive reinterpretation and growth: 1, 29, 38, 59

Mental disengagement: 2, 16, 31, 43

Focus on and venting of emotions: 3, 17, 28, 46

Use of instrumental social support: 4, 14, 30, 45

Active coping: 5, 25, 47, 58

Denial: 6, 27, 40, 57

Turning to religion: 7, 18, 48, 60

Humor: 8, 20, 36, 50

Behavioral disengagement: 9, 24, 37, 51

Restraint coping: 10, 22, 41, 49

Use of emotional support: 11, 23, 34, 52

Substance use: 12, 26, 35, 53

Acceptance: 13, 21, 44, 54

Suppression of competing activities: 15, 33, 42, 55

Planning: 19, 32, 39, 56
Appendix C

Three-Dimensional Wisdom Scale

For the statements below, simply circle your answer: 1, 2, 3, 4, or 5. Circle only one number. There are no right or wrong answers.

How strongly do you agree or disagree with the following statements? (1 = strongly agree to 5 = strongly disagree)

1. Ignorance is bliss.
   1 2 3 4 5

2. It is better not to know too much about things that cannot be changed.
   1 2 3 4 5

3. In this complicated world of ours, the only way we can know what’s going on is to rely on leaders or experts who can be trusted.
   1 2 3 4 5

4. There is only one right way to do anything.
   1 2 3 4 5

5. A person either knows the answer to a question or he/she doesn’t.
   1 2 3 4 5

6. You can classify almost all people as either honest or crooked.
   1 2 3 4 5

7. People are either good or bad.
8. Life is basically the same most of the time.

9. Things often go wrong for me by no fault of my own.

10. I would feel much better if my present circumstances changed.

11. I am annoyed by unhappy people who just feel sorry for themselves.

12. People make too much of the feelings and sensitivity of animals.

13. There are some people I know I would never like.

14. I can be comfortable with all kinds of people.

15. It's not really my problem if others are in trouble and need help.
How much are the following statements true of yourself? (1 = definitely true of myself to 5 = not true of myself)

1. A problem has little attraction for me if I don’t think it has a solution.
   1 2 3 4 5

2. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.
   1 2 3 4 5

3. I prefer just to let things happen rather than try to understand why they turned out that way.
   1 2 3 4 5

4. Simply knowing the answer rather than understanding the reasons for the answer to a problem is fine with me.
   1 2 3 4 5

5. I am hesitant about making important decisions after thinking about them.
   1 2 3 4 5

6. I often do not understand people’s behavior.
   1 2 3 4 5

7. I try to look at everybody’s side of a disagreement before I make a decision.
   1 2 3 4 5

8. When I’m upset at someone, I usually try to “put myself in his or her shoes” for a while.
   1 2 3 4 5
9. I always try to look at all sides of a problem.
   1  2  3  4  5

10. Before criticizing somebody, I try to imagine how I would feel if I were in their place.
    1  2  3  4  5

11. I sometimes find it difficult to see things from another person’s point of view.
    1  2  3  4  5

12. When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information.
    1  2  3  4  5

13. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.
    1  2  3  4  5

14. When I look back on what has happened to me, I can’t help feeling resentful.
    1  2  3  4  5

15. When I look back on what’s happened to me, I feel cheated.
    1  2  3  4  5

16. I either get very angry or depressed if things go wrong.
    1  2  3  4  5

17. Sometimes I don’t feel very sorry for other people when they are having problems.
    1  2  3  4  5
18. Sometimes I feel a real compassion for everyone.
   1 2 3 4 5

19. I often have not comforted another when he or she needed it.
   1 2 3 4 5

20. I don’t like to get involved in listening to another person’s troubles.
   1 2 3 4 5

21. There are certain people whom I dislike so much that I am inwardly pleased when they are caught and punished for something they have done.
   1 2 3 4 5

22. Sometimes when people are talking to me, I find myself wishing that they would leave.
   1 2 3 4 5

23. I’m easily irritated by people who argue with me.
   1 2 3 4 5

24. If I see people in need, I try to help them one way or another.
   1 2 3 4 5