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Validating the 'Centering for Wisdom Assessment': Assessing the Role of Contemplative Practices in the Cultivation of Practical Wisdom

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Abstract

This study provides empirical evidence to validate the theoretical foundations of a new psychometric tool, the Centering for Wisdom Assessment (CWA), aimed at assessing the relationship between contemplative practices and the cultivation of the virtue of practical wisdom. In this paper, we first describe the theoretical foundations of the CWA. Next, we present the results of three different validity studies that provide evidence of content, criterion, and construct validity. The results indicate that the CWA is internally consistent, related to the theoretically-similar construct of mindfulness, not related to religious commitment, and predicts – above and beyond mindfulness – relevant criterion variables including wisdom, hope, forgiveness, stress, anxiety, and depression. We conclude that the CWA is ready for use in pedagogical, spiritual, or leadership development contexts, and provide suggestions for future studies.

Key Words: practical wisdom, contemplation, mindfulness, meditation, assessment, validation

"Keep moving to the center of your being where divine love is and be present to and welcome whatever bodily feeling or emotion that is happening. The present moment contains all we need to be happy."

- Fr. Thomas Keating, OCSO (2015)

Practical wisdom is a classical virtue that continues to offer insight into the process of wise decision-making (Schwartz & Sharpe, 2007). It includes the skill of good judgment and action that emerges out of a cognitive and emotional state of mind relatively free of attachments or distractions (Hursthouse, 1999, p. 108; Mattison, 2008, p. 84). Indeed, many classic texts from a variety of philosophical and spiritual traditions teach practitioners how to deal effectively with thoughts and distraction in order to access greater wisdom (Brach, 2004; Keating, 2004; Ponticus, 1981). Both Aristotle and Thomas Aquinas note that passions – or emotional responses to cues in one's environment – have the potential either to support or to disrupt the process of practical wisdom. Although excessive or disordered emotional reactions may interrupt wise ethical discernment, context-appropriate and well-ordered passions provide a necessary component of motivation and desire that disposes a person toward wise choices and actions.

Recently, some scholars have begun to place this classical Aristotelian and Thomistic tradition of practical wisdom into dialogue with psychological research. They have noted that practical wisdom requires the capacity to rightly order one's emotional responses in alignment with right reason (Bushlack, 2014; Kinghorn, 2015; and Schwartz & Sharpe, 2007). Neuroscientists, psychologists, and medical doctors have also demonstrated that contemplative practices – ranging from basic mindfulness meditation to explicitly theological forms of contemplative prayer – may help practitioners to effectively identify and moderate potentially disruptive cognitive and/or emotional disturbances. Such disruptions may include anxiety,

depression, or obsessive thoughts. These kinds of cognitive-emotional fluctuations have the capacity to disrupt the brain's executive function, which involves attentional control, impulse suppression, and the ability to flexibly monitor and direct one's thoughts and behavior (Davidson & Begley, 2012; Kabat-Zinn, 2009; Khoury, et al., 2013; Zeidan, et al., 2010).

We postulated, therefore, that contemplative practices – as embodied practices that integrate intellect with body, mind, and emotional states – have the potential to help an agent act in ways that are congruent with right reason and well-ordered passions. In other words, the embodied form of self-awareness that is cultivated within contemplative traditions is likely to help the practitioner to manage thoughts and emotions more effectively – that is, in ways that support the exercise of practical wisdom. No validated psychometric tool currently exists for assessing and providing feedback to practitioners regarding their cognitive and emotional responses that may either disrupt or support practical wisdom. Therefore, the first author created a new assessment that is intended to help test takers recognize their most disruptive cognitive-emotional reactions so that they may leverage contemplative practices in order to facilitate the development of practical wisdom.

The new measure, called the Centering for Wisdom Assessment (CWA), is founded on the claim that every person is endowed with an innate center of wisdom – an interior space of freedom, creativity, and compassion from which wise choice and action emerges. The CWA provides feedback to test takers by indicating the degree of intensity they typically experience in four categories of mind or consciousness: attachment, avoidance, pride, and shame. The purpose of the current study is to test the validity of the CWA to determine if it provides an accurate measure of cognitive and emotional patterns that may either interfere with or support the cultivation of practical wisdom.

Our paper proceeds in five parts. The first part explains the theoretical foundations upon which the CWA is constructed. The next three parts are empirical studies providing evidence of validity for the CWA. The second part describes a content validity study in which we gathered feedback from experts in contemplative practices and moral discernment. The third part describes a validity study whereby we garnered evidence of internal consistency, convergent, and concurrent validity. In part four, we report a third validity study, this one showing new evidence of discriminant and incremental validity. The fifth and final part includes a general discussion of the results and suggestions for further research.

Theoretical Foundations

The CWA was created by the first author for an undergraduate, introductory course on Christian ethics at a Catholic, liberal arts university in the Mid-Western United States. The instructor was seeking to create a formative exercise for students at the end of a unit on the relationship between contemplative practices and the cultivation of the virtue of prudence, or practical wisdom. In this unit students read about contemplation in a variety of traditions, ranging from general mindfulness practices (Nhat Hanh, 1987[1]) to distinctively theological forms of Christian contemplative prayer (Larkin, 2007[2]). Students were also invited to participate in mindfulness practices guided by the instructor. Each student was free to choose whether or not to participate in these activities, and encouraged to cultivate a mindfulness practice that is congruent with their individual spiritual or religious preferences (including non-religious, secular forms of mindfulness).

[1] Nhat Hanh describes the essential discipline of mindfulness as "following the breath" (p. 17), which includes the simple acts of "watching and letting go" (p. 35).
[2] Larkin writes that mindfulness in the tradition of Christian contemplative prayer includes both an awareness of the person's oneness or communion with the divine presence in a relationship of reciprocal love and "special attention to the concrete and finite aspects of action" (p. 1).

The CWA was therefore intended as a formative tool to help students to integrate contemplative practices with wise moral discernment. The results of the CWA provide test takers with feedback on the relative strength of their cognitive and emotional reactions to cues in their internal and external environments, indicating areas where they are most likely to be triggered, or pulled away from their center of wisdom. Since the course had been structured around Saint Thomas Aquinas's (1225-1274 CE) treatment of the virtues, the two axes in Figure 1 are framed in terms of Aquinas's emphasis upon the faculties of the intellect and the will, or "Judging Mind" and "Desiring Mind" respectively (described in more detail below).

The development of the CWA is also informed by the first author's 18 years of practicing meditation. His practice is informed primarily by the Christian tradition of contemplative prayer,[3] and also by regular dialogue and encounter with practitioners and texts in Jewish and Muslim forms of mysticism, Buddhist and yoga forms of meditation, and with instructors trained in the Mindfulness-Based Stress Reduction program.[4] As an academic trained in the discipline of Christian ethics with extensive experience in meditation, the first author believed there to be a strong connection between contemplative practices and moral formation. Indeed, the Christian ethicist and psychiatrist Warren Kinghorn (2015) has claimed that "practices of mindfulness are actually practices of moral formation" (p. 84). The CWA began as an effort to concretize, operationalize, and test this claim. The early validation results (described below) suggest that this belief is correct, and that fruitful avenues of research and pedagogical application exist for continuing to explore and improve this link between contemplation and moral wisdom using the CWA.

[3] The author is a commissioned presenter on Centering Prayer through Contemplative Outreach, Ltd. (www.contemplativeoutreach.org/).
[4] http://www.umassmed.edu/cfm/

The CWA reflects a basic claim about the human person, which is that each person is naturally endowed with an innate capacity or potential for wise choice and action. The cognitive-emotional space that most fully facilitates access to this innate capacity is referred to as a person's center, or center of wisdom. Practices that facilitate access to this creative space we also refer to as centering *for* wisdom. This anthropological claim is reflected in a wide array of philosophical, theological, and/or spiritual traditions. For example, the Jewish and Christian Scriptures claim that all people possess inherent dignity as made in the image of God (Gen. 1:27) and therefore all persons have the capacity to exercise reason and free will. In the Islamic tradition the concept of *taqwa* is identified as a universal human capacity to exercise moral discernment and action (*Qur'an* 49:13; Cited in Nanji, 1991, p. 109). The Mahayana Buddhist tradition maintains that every person possesses Buddha nature, an innate and universal capacity to cultivate a fully enlightened and compassionate mind (*Pabhassara sutta*, 1.49-52). The five ethical precepts taught by the Buddha are a necessary component of the contemplative cultivation of one's Buddha nature (Harvey, 2000, pp. 66-79; and Saddhatissa, 2003, pp. 59-80). In the yoga tradition the Sanskrit term *yoga* means "union" or "oneness," and one achieves union with the divine through "the stilling of the modification of the mind" (Patanjali, 2015, 1.2). This path of union is supported by the *yama*, or the ethical disciplines that are listed first among the eight limbs of *ashtanga yoga* (Iyengar, 1995, pp. 31-6; Patanjali, 2015, 2.30). Finally, in a more secular, corporate context the Co-Active Coaching model used by many corporations for executive training is grounded in the assumption that each employee already possesses the innate capacity for wise leadership (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011). Thus, the claim that each person possesses an innate potential for wisdom that can be accessed and activated through self-awareness and the cultivation of certain contemplative and ethical

disciplines seems to be a generally accepted anthropological assertion within a wide array of philosophical, theological, and/or spiritual traditions.

Maintaining a consistent mindfulness or contemplative practice inculcates important skills that help a person to become centered for wisdom. We can identify several characteristics that support practical wisdom. These include qualities such as equanimity, recollection, or a non-anxious presence. Equanimity is one of the four "divine abodes" (*brahma-vihara*) in the Buddhist tradition, and is a state of "unbiased impartiality" which accepts other persons – indeed, all beings – as equally valuable as oneself (Harvey, 2012, p. 154). Mystics in the Christian tradition refer to a state of being recollected, or the recollected self. Saint Teresa of Avila (1515-1582 CE) describes recollection as a state in which "the soul collects its faculties together and enters within itself to be with its God…centered there within itself" (*The Way of Perfection*, Ch. 28, no. 4; 1980, p. 141). Saint John of the Cross (1542-1591 CE) tethers recollection together with wisdom when he writes that the soul "recollects itself in the presence of God…drinking wisdom and love and delight" (*Ascent of Mount Carmel*, Bk. II, Ch. 14, no. 2; 1979, p. 143). He adds that one acquires "solid virtue" by "entering into the living temple of spiritual recollection" (*Ascent*, Bk. III, Ch. 41, no. 1; 1979, p. 284). The rabbi, family systems therapist, and leadership coach Edwin Friedman (2007) describes the ideal state of a leader – whether a parent, coach, executive, etc. – as one who is able to endure the toxic stress and pressures that all leaders encounter while maintaining a "non-anxious, challenging presence" (p. 110). By instilling the skills of remaining in a state of equanimity, recollection, or non-anxious presence, contemplative practices strengthen the capacity to become centered for exercising practical wisdom.

The CWA is structured around two additional claims. The first is that persons have the potential to respond to cues in their internal and external environments in either adaptive or

maladaptive ways (Kabat-Zinn, 2009, pp. 259 & 264). The second is that contemplative practices facilitate more adaptive responses. The more strongly an agent responds in maladaptive ways to contextual cues, the more the person feels fragmented or pulled away from his or her center of wisdom. Correlatively, the less strongly one is triggered by such cues, the more likely he or she is to remain centered and to leverage that capacity toward wise choices and actions. For example, imagine the following scenarios. A student is considering cheating on a final exam, and is caught up in a dilemma of conscience. On the one hand, he feels strongly pulled by the contextual cues of the situation: he has not adequately prepared for the exam, he has a minimum GPA requirement for maintaining an academic scholarship, and he values being perceived as successful by others. On the other hand, when he is not distracted by these cues and feels strongly centered, he realizes that cheating is not congruent with his personal sense of integrity or the notion that grades should honestly reflect his effort and level of mastery of the subject. Moreover, he recognizes the risk that getting caught could lead to failure of the exam, which would be even more detrimental to his overall GPA.

Consider a similar scenario of a corporate executive deliberating about whether or not to use misleading accounting procedures to cover up signs of financial weakness within her company's balance sheet. She is aware that such information is likely to be used by investors and stakeholders. Obscuring the company's weaknesses could bolster profits by attracting potential investors. She is likely to be rewarded by her supervisors for helping to improve the company's public image of financial stability. These external rewards – which are the distracting contextual cues in this situation – also align with her desire for the company to do well, to receive financial compensation for her work, and to appear successful to others. On the other hand, when she is very centered, she is aware that providing false information is not

congruent with her personal sense of integrity, the principles of her profession in corporate finance, or with the law. Moreover, she recognizes that getting caught could lead to disastrous consequences for her employer, financial loss to investors, the loss of her career, potential legal implications, and the loss of the esteem of others. Most people would likely agree that cheating in both cases represents a maladaptive response, since it is dishonest and carries the highest possibility of negative outcomes for the individual, for others, and for the common good of society.

In these scenarios, practical wisdom is facilitated by awareness and thoughtful responses to environmental cues. It is undercut by uncritical reactivity to stimuli. An adaptive response may therefore be described as one in which a person is aware of the strength of his or her cognitive and emotional reactions to cues in the internal or external environment, and is able to respond thoughtfully and from a centered, recollected, or non-anxious presence. A maladaptive response is one in which a person reacts to cues without critical reflection or self-awareness, thereby increasing the toxic anxiety and fragmentation that disrupt practical wisdom. Thus, a person who remains centered is more likely to maintain a sense of equanimity and then to *respond* to cues in adaptive – that is, practically wise – ways. A person in a fragmented or de-centered state is more likely to *react* to cues in maladaptive ways. Therefore, distractions that are likely to trigger maladaptive responses and a sense of fragmentation are also likely to disrupt the process of practical wisdom. This claim is consistent with recent findings in neuropsychology on the potentially negative effects of stress upon ethical decision-making (Starcke & Brand, 2012; and Starcke, Polzer, Wolf, & Brand, 2011).[5]

[5] It is worth highlighting here that stress has the *potential* to contribute to maladaptive choices. Whether or not it will do so depends on how one responds to the potentially toxic effects of stress. Starck and Brand (2012) note that under certain conditions stress can actually confer an advantage in ethical decision-making by focusing one's attention on the ethical dilemma and activating resources to adequately address it. Similarly, Kabat-Zinn (2009)

From the perspective of the CWA, the stronger our hypothetical student and corporate executive are triggered by their desires to maintain a high GPA, to achieve financial gains, and to appear successful to others, the more they will be drawn away from their center of moral wisdom. Conversely, if our student and executive can remain aware of the strength of these potentially fragmenting desires and thoughts, the more likely they are to make an adaptive choice that is ultimately in the best interest of themselves and others. In other words, remaining centered – that is, mindfully and non-judgmentally acknowledging the strength of one's cognitive and emotional reactions without reacting – facilitates a more adaptive response. Skillful application of the results of the CWA facilitates the cultivation of practical wisdom in so far as it may help test takers to identify the relative strength of maladaptive reactions to internal stimuli (such as thoughts, emotions, bodily sensations, etc.) and external stimuli (anything perceived by one of the five senses).[6]

Figure 1 presents a way of conceptualizing the field of human awareness. Both Aristotle and Aquinas maintain that the foundation of all human knowledge derives from the physical senses of the body. This is the mode of knowing proper to human beings. At the same time, however, human self-awareness or self-consciousness as such is manifested within the intellectual or rational powers of the human person (see *Summa Theologiae*, I. Q. 87). And yet persons must have both *knowledge* and *motivational desire* in order to move toward action. Aquinas refers to these two components of human knowing and desiring as intellect and will respectively. It is within these two powers "in which the [moral] virtues reside" (*Summa*

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discusses how mindfulness practices can help the practitioner turn potentially stressful cues into what Hans Selye refers to as *eustress* (or "good stress") rather than *dis*tress (p. 246).

[6] It should be kept in mind that awareness itself is essentially one – that is, it is experienced as a unified field of perception – even as more accurate distinctions among the field of awareness can be helpful for identifying powerful triggers and maladaptive responses. Although conceptually unrelated to the CWA, Daniel Siegel's (2011) notion of the "hub of awareness" presents an analogous example of distinguishing the distinctive components within the field of awareness.

Theologiae, I. Q. 78, Prol.). It is the virtue of practical wisdom (*phronesis* in Greek, or *prudentia* in Latin) that integrates the intellect or reason with emotion and motivational desires and places these powers at the service of action. From this we can infer that practical wisdom requires an ability to remain mindful of or tuned in to the various stimuli within one's field of awareness. Such mindfulness also includes cognizance of one's subjective reactions – including both cognitive and emotional reactions – to those stimuli. The CWA results provide a visual conceptualization of and numerical approximation of the relative strength of a test taker's typical reactions to stimuli.

The X-axis in Figure 1 corresponds to the intellect or judging mind. The intellect, or reason, discriminates between the various qualities of things. When a person has cultivated a capacity to remain centered, such distinctions are simply noted, accepted, and responded to with wisdom and intention. However, a more reactive response is signaled by the habit of judging objects, situations, or others as "better than" or "worse than." When such judgments are present a person is beginning to react rather than to respond. Reactions that include judgments of one's self as better than others are labeled as pride. Reactions that entail judgements of one's self as worse than others are labeled as shame. In the examples mentioned above, both the student and the executive are drawn away from their centers of wisdom by their sense of pride. Such pride is expressed in their desire to appear successful – that is, "better than" – to others. Correlatively, their fear of being caught cheating is represented in their not wanting to appear fraudulent – that is, "worse than" – to others.

Notice that it is not the desire to be successful in itself that causes the fragmentation that erodes practical wisdom. Rather, it is the maladaptive reaction to internalized notions of success as a means of appearing better than others (pride) or not appearing worse than others (shame)

that is the source of being drawn from one's center of wisdom. Taking pride in a job well done and being rewarded for such acts is a healthy aspect of the inherent dignity of work. Indeed, it is both psychologically and spiritually healthy, and an expression of practical wisdom, to recognize and to cultivate one's skills in a manner that contributes to personal success and to the common good of one's employer and community. A person who remains in a centered for wisdom is able to maintain a healthy desire for this kind of success while recognizing that success or failure does not ultimately make one better or worse than others. Such a wisely centered person shares his or her gifts for the good of others, while remaining cognizant of his or her inherent value and equality. Healthy pride in a job well-done is an expression of living from one's center, while self-referential judgments of pride or shame are maladaptive cognitive dimensions of self-awareness that draw persons away from their center of wisdom. These maladaptive cognitive reactions are represented on Figure 1's X-axis as pride or shame.

In addition to the cognitive or intellectual component of action, the CWA also accounts for the motivational or desiring aspect of practical wisdom. Humans are naturally drawn toward situations that result in pleasure, and seek to avoid those that result in pain. Following these natural inclinations can be an adaptive response that protects one from dangerous situations and enhances well-being. A person who has cultivated a capacity to remain centered for wisdom recognizes the inevitability and impermanence of painful and pleasurable experiences. Equanimity is the disposition that emerges from this sense of acceptance of the ever-changing conditions of the human experience. However, there is a secondary, maladaptive reaction that may also occur in response to pleasurable or painful stimuli. At some point most people develop idiosyncratic habits aimed at maximizing pleasure and minimizing pain. The effort to control one's circumstances in this way cultivates maladaptive reactions that begin to pull one away

from his or her center of wisdom. Under certain conditions, such reactions may become addictions. As Gerald May (1988) writes, "addiction *attaches* to desire, bonds and enslaves the energy of desire to specific behaviors, things, or people," and, he adds, "all of us suffer from addiction" to varying degrees (p. 3). In the examples provided above, the temptation to cheat or falsify information derives from a desire to control the situation (using deceit). By cultivating the adaptive habit of noting these reactions without immediately responding, contemplative practices help persons to align reason, desire, choice, and action in ways that favor wise choices and actions.

The CWA reflects this contemplative insight by indicating scores of attachment and aversion on Figure 1's Y-axis, or desiring mind. When one is drawn toward pleasurable objects, persons, or experiences the desire to maintain or recreate this state is referred to as "attachment." And when a person attempts to evade objects, persons, or experiences that cause fear or pain the resulting state is referred to as "avoidance" (Bushlack, 2014, p. 146). Our hypothetical student manifests attachment to maintaining a high GPA, while the corporate executive illustrates attachment to monetary reward. Similarly, the student exemplifies avoidance when he wishes to evade the negative outcomes of honestly accepting a lower grade in the course. And the executive displays avoidance when she seeks to skirt the potentially negative outcomes of remaining honest. Just as with the judging mind, when a person remains centered that person simply observes the force of these initial reactions and responds wisely, mindfully, and intentionally.

It is important to clarify the sense in which we are using the term "attachment" when interpreting the results of the CWA. Both attachment and avoidance are natural human inclinations. Indeed, they are often necessary for survival. However, there is an important

distinction between the way in which contemplative traditions describe the spiritual psychology of unhealthy attachment and the way in which attachment is discussed in developmental psychology. The concept of attachment that is identified in the CWA helps the test taker to identify maladaptive forms of attachment. This kind of attachment or desire is analogous to the "craving" which is listed as the second of the Four Noble Truths of Buddhism. Harvey (2000) describes this craving as "demanding desires which lay one open to frustration and disappointment" (p. 31). Such craving is understood as the root cause of all suffering in Buddhism. Moral wisdom emerges in proportion to the extent that one is able to extinguish maladaptive craving. Similarly, John of the Cross suggests that progress in the spiritual life is made possible by the elimination of craving and desire. He draws upon the Thomistic language of the appetites to name these desires. He writes that "the appetites sap the strength needed for perseverance in the practice of virtue" (*Ascent of Mount Carmel*, Bk. I, Ch. 10, no. 1; 1979, p. 94). For John, true peace is only found in spiritual detachment from external pleasures and pains, while remaining centered both in oneself and in the continual awareness of living in the merciful presence of God. In this sense attachment is an internal, spiritual-psychological reaction to cues which are desired as a means of seeking a false sense of satisfaction and security. The CWA mirrors the wisdom developed in contemplative traditions by helping to reveal the many-faceted ways in which desire, craving, or disordered appetites contribute to a lack of integration and to a fragmented sense of self. The relative strength of this maladaptive tendency is represented by the CWA in higher scores in the attachment category.[7]

[7] This spiritual psychology of maladaptive attachment is to be distinguished from the kind of adaptive human attachment in relationships that ideally begins in infancy and develops throughout a person's life (Bowlby, 1969). Adaptive or healthy attachment is referred to in psychological terms as "secure attachment," and it is cultivated by relationships that include a high level of trust, mutual support, a capacity for forgiveness, and unconditional acceptance or love. Indeed, a lack of secure attachment in infancy can be an early indicator of many long-term negative health outcomes (Lopez, Pedrotti & Snyder, 2015, p. 326). The CWA does not attempt to identify whether

The four-quadrants in Figure 1 provide a visual representation of the typical ways in which a person reacts cognitively and emotionally to cues in the environment. Cognitive reactions are displayed on the X-axis as the "Judging Mind" and include judgments of Pride or Shame. Emotional reactions are displayed on the Y-axis as "Desiring Mind" and include emotions of Avoidance or Attachment. Finally, we note that each axis does not represent a zero-sum game. For example, strong reactions of pride do not necessarily correlate with low reactions of shame, or vice-versa. Nor do strong reactions of avoidance necessarily correlate with low reactions of attachment, or vice-versa. The student considering cheating can be pulled – or fragmented – simultaneously by his attachment to maintaining a high GPA and his avoidance of accepting the just outcome of failing the exam. The results of the CWA are mapped as four different scores on a scale from one to five in each of the four aspects of awareness. The results are provided in the form of visual and numerical feedback provided by a four-quadrant kite graph. Higher scores indicate higher reactivity to stimuli in that category of awareness, and suggest areas where the test taker tends to be drawn away from his or her center of wisdom.

Study 1: Content Validity

Our first goal was to improve the content of the questions by gathering feedback from experts in contemplative practices and ethical discernment. A list of experts was created by the first author, who then contacted each person directly, either in person or via email or phone. Experts in contemplative practices were sought who had a long-standing and regular commitment to a personal practice, [8] and who would represent a broad spectrum of different forms of mindfulness, meditation, or contemplative prayer from a variety of spiritual or religious

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one has cultivated secure relationship attachments. However, it seems reasonable to suggest that secure attachment would foster a sense of being centered for wisdom.

[8] No specific time period of practice was indicated, but all experts had been practicing for several years and had received focused instruction in order to have demonstrated some mastery of a particular form of practice.

traditions, or none at all. Experts were identified based upon one of two criteria: (1) either the first author had a personal and/or professional relationship with the person and could verify his or her commitment to a regular and long-standing practice, or (2) the person is a public figure who is known for his or her teaching and commitment to a tradition and a practice (based upon publically available forms of media). The first author also identified a list of experts in ethical discernment. These participants all had terminal degrees (Ph.D. or equivalent) and were actively engaged in teaching and research in moral philosophy, psychology, or theology. The purpose of this study was to gather input from experts who could provide feedback for improving the clarity and domain representativeness of the CWA's content.

Method

Participants. We collected data from 18 experts. Eight (44%) respondents were male, and 10 were female (64%). All of the respondents were from the United States, and slightly more than half (56%) were age 55 or older (39% were between the ages of 35-44, and 6% between 45-54). One respondent (6%) had a Bachelor's degree, 8 (44%) had a Master's degree, and the remaining 9 (50%) had a Ph.D. or equivalent.

Materials. Participants first completed the original, 20-question version of the CWA. After completing the entire assessment, they were then asked to rank how well they understood each individual question on a 5-point Likert scale ranging from 1 ("Very Poorly") to 5 ("Very Well"). If a participant responded with 1 ("Very Poorly"), 2 ("Poorly"), or 3 ("Somewhat"), they were prompted to "provide any suggestions for how this question could be stated more clearly," and their feedback was recorded. A final question asked participants to provide additional questions to add to the assessment.

Procedure. Participants were provided with a link sent via email to an online survey administered using Qualtrics Survey Platform. After reading the Consent Form and agreeing to participate in the study, participants completed the entire survey and all answers remained anonymous.

Results and Discussion

Of the 20 questions on the original CWA, 10 (50%) were scored by all participants as either 4 ("Well") or 5 ("Very Well"). Those 10 items were retained without revision for the next phase of the study. Any items that received at least one response between 1 ("Very Poorly") and 3 ("Somewhat") were revised for improved clarity. All participants' feedback and comments were given equal consideration and were incorporated into a revised form of the question. No items were deemed so unclear as to necessitate removal from the assessment. Six questions were added to the CWA based upon the additional examples provided by the content experts. As a result, 10 items remained the same, 10 were revised for clarity, and 6 were added, for a total of 26 questions (listed in the Appendix) that were used for the construct validation studies.

Study 2: Internal Consistency, Convergent and Concurrent Validity

We conducted a validation study of the CWA aiming to provide evidence of internal consistency, convergent validity, and concurrent validity. To provide evidence of convergent validity, we need to show that our measure is strongly related to other measures of the same construct. Unfortunately, no other measure captures exactly what we are assessing: centering for wisdom. However, the construct of mindfulness addresses contemplative practices, which form the cornerstone of the centering for wisdom construct. Mindfulness may be described as "a process of regulating attention in order to bring a quality of nonelaborative awareness to current experience and a quality of relating to one's experience within an orientation of curiosity,

experiential openness, and acceptance" (Bishop et al, 2004, p. 234). Like mindfulness, centering for wisdom focuses heavily on being able to regulate attention in a non-judgmental, accepting manner.

Regarding concurrent validity, wisdom is the obvious choice for a criterion. The CWA claims to measure a state of mind ("centering") that *facilitates* wisdom, or centering for wisdom. Thus, if one is very centered according to their CWA score, the person is more likely (but not guaranteed) to make wise choices and show wise behaviors. Researchers have defined wisdom in several different ways. Bangen, Meeks, and Jeste's (2013) review of the literature showed substantial overlap among definitions of wisdom that included social decision-making, prosocial values, reflection, acknowledgement of uncertainty, emotional homeostasis, tolerance of many diverse values, openness to new experience, spirituality, and sense of humor. We argue that a strongly centered person, according to the CWA, would be likely to illustrate these dimensions of wisdom.

Thus, the overall purpose of this particular study is to produce evidence of reliability and validity for the CWA. We specifically examined three hypotheses. (a) The CWA will be internally consistent. (b) The CWA will be strongly related to a measure of mindfulness for evidence of convergent validity. (c) The CWA will be related to a measure of wisdom for evidence of concurrent validity.

Method

Participants. We collected data from 153 adult participants who were Amazon Mechanical Turk workers. Regarding gender, 62% were male. The vast majority of participants (77%) resided in North America, with 13% residing in Europe, 9% in Asia, and 1% in Central or South America. Most participants (56%) were between the ages of 25 and 34 (11% were between

18 and 24, and 33% were 35 and older). Participants' level of education varied: 47% had a Bachelor's degree, 27% some college, 13% high school or General Education Diploma, and 13% Master's degree or higher.

Materials. Participants completed three different measures, which assessed centering for wisdom, mindfulness, and wisdom. Our new assessment, the CWA, measured centering for wisdom. Our construct of centering for wisdom included four aspects of human awareness: avoidance, attachment, pride and shame. Thus, these four aspects provided the foundation of the CWA that are the four different subscales. The CWA consisted of 26 items total (see the Appendix). In responding to each item, participants used a 5-point Likert scale ranging from 1 ("Never or almost never") to 5 ("Always or almost always"). Possible mean scores for the subscales and overall measure ranged from 1.00 (high centering for wisdom) to 5.00 (low centering for wisdom).

We used the short form of the Freiburg Mindfulness Inventory (FMI; Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006) to assess mindfulness, defined as "an alert mode of perceiving all mental contents—perceptions, sensations, cognitions, affects" that includes having an "accepting and non-judgmental attitude towards those elements of our mind" and being able to suspend categorical judgments (Walach et al., 2006, p. 1544). The FMI consisted of 14 items and a 4-point Likert-type scale ranging from "Rarely" to "Almost always." Possible mean scores ranged from 1.00 (low mindfulness) to 4.00 (high mindfulness). The FMI-short version has shown evidence of reliability and validity (Walach et al., 2016) and good evidence of internal consistency in this study with a Cronbach alpha of .89.

For wisdom, we employed the Brief Wisdom Screening Scale (BWSS; Glück, König, Naschenweng, Redzanowski, Dorner, Straßer, & Wiedermann, 2013), which is a composite of

three self-report measures of wisdom, derived from factor analyses. The BWSS was comprised of 21 items total that captured several aspects of wisdom, including self-transcendence, emotion regulation, reflective dimension, openness, humor, and critical life experience. Participants answered each item using a 5-point Likert scale ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). Possible mean scores ranged from 1.00 (low wisdom) to 5.00 (high wisdom). The internal consistency of the BWSS was very good, producing a Cronbach alpha of .84.

Procedure. All measures were administered online via Qualtrics Survey Platform. After reading the Consent Form and agreeing to participate in the study, Amazon Mechanical Turk workers completed the measures in the following order: CWA, FMI, BWSS, and demographic questions.

Results and Discussion

We wanted to test three different hypotheses: one concerning the CWA's internal consistency, another addressing evidence of convergent validity, and a third focusing on concurrent validity. Before examining each of these hypotheses, we looked at the measures' descriptive statistics, computing means and standard deviations (see Table 1). Regarding internal consistency, we computed Cronbach alphas for each of the four sub-scales and the overall CWA. We found evidence of internal consistency: the overall Cronbach alpha for the CWA was .82. Cronbach alphas for each of the four subscales were the following: avoidance = .68, attachment = .74, pride = .72, and shame = .80. Regarding evidence of convergent validity, the CWA was significantly related to mindfulness in the predicted direction: $r = -.55$, $p < .001$ (see Table 1). Evidence of concurrent validity was very good, with the CWA being related to wisdom in the predicted direction: $r = -.44$, $p < .001$. Overall, the CWA revealed good initial evidence of internal consistency, convergent validity, and concurrent validity.

Study 3: Discriminant and Incremental Validity

In this third and final empirical study, we set out to replicate the findings from the previous study for internal consistency, convergent and concurrent validity as well as provide new evidence of discriminant validity and incremental validity. As seen in the previous study, the CWA strongly related to mindfulness as we expected. In this study, we sought to verify the notion that centering for wisdom is similar to mindfulness, yet sufficiently distinct from mindfulness for practical utility. The two constructs are alike in that they are both contemplative practices that emphasize present-centered awareness. However, despite this commonality, centering for wisdom adds a distinctive element to basic mindfulness. Mindfulness practices develop a person's capacity to recognize internal and external states of affairs, and to maintain a non-reactive, non-judgmental state of equanimity. This state is sometimes described as open awareness, or "choiceless awareness" (Kabat-Zinn, 1990, p. 71). In this state the faculties remain open and receptive, but are passive rather than actively engaged. This is a necessary first step in centering for wisdom. However, as one utilizes contemplative practices as a tool for cultivating practical wisdom, there is a necessary shift in intention toward engaging the faculties of intellect and will toward wise action. Because mindfulness opens one to the fullness of the present moment and imparts skills that quiet the discriminating mind – which may be susceptible to bias and emotional reactions – it is particularly helpful for accurately assessing a situation. An accurate perception or assessment of the situation is a necessary first step in exercising practical wisdom.[9] Therefore, mindfulness facilitates the capacity to accurately perceive the context within which one must exercise choice and apply it to action.

[9] In Catholic social teaching the phrase "See, Judge, Act" is often used to describe a three-phase process for adequately assessing a situation of injustice and deliberating about how best to respond (John XXIII, 1961, par. #236).

In order to exercise practical wisdom, however, one must also move beyond this kind of choiceless or open awareness. One must move toward intentional action by engaging the faculties of intellect and will in moral deliberation. Thus, centering for wisdom builds upon basic mindfulness by integrating the more passive stance of open awareness with the more active processes of moral discernment and action.

Our examination of the distinctiveness of centering for wisdom from mindfulness entailed garnering evidence of incremental validity. This type of validity "concerns the degree to which a particular measure provides explanatory power over and above another measure in predicting a relevant criterion" (Bryant, King, & Smart, 2006, p. 66). Thus, we examined the degree to which the CWA provides explanatory power over and above mindfulness. In terms of relevant criterion variables, we focused on variables of spiritual and psychological well-being. For psychological well-being, we believed that the CWA should specifically predict depression, anxiety, and stress above and beyond that of mindfulness. This hypothesis emerges from the distinction between mindfulness as open awareness and centering for wisdom as intention-directed activity noted above. Specifically, the CWA measures the relative strength of one's *level of reactivity* toward cues typically encountered in daily life. Since higher scores reflect a higher level of reactivity, or being triggered, we hypothesized that in addition to disrupting the exercise of practice wisdom higher levels of reactivity could also be a contributing factor to higher levels of stress. Over time higher levels of stress may also contribute to greater susceptibility to anxiety and depression. A significant number of recent empirical studies have indicated that mindfulness is correlated with lower levels of stress, anxiety, and depression (see, for example, Khoury, Sharma, Rush, & Fournier, 2015). However, we hypothesized that lower

CWA scores which indicate lower levels of reactivity should more adequately predict lower levels of stress, depression, and anxiety than mindfulness alone.

In terms of spiritual well-being, we carefully scrutinized what facets of spiritual well-being to which the CWA should be related. As described earlier, the CWA is rooted in spiritual concepts (e.g., attachment) and practices (e.g., contemplative prayer, meditation). Thus, we believed that facets of spirituality should be related to one's CWA scores. Hope and forgiveness are two aspects of spiritual well-being to which we believed the CWA should be related. With regard to hope, contemplative practices facilitate a kind of "temporal integration" (Kinghorn, 2015, p. 94). This temporal integration enables a practitioner to draw simultaneously upon learning from past experience via memory, situational awareness in the moment, and foresight about the most likely future outcomes of current choices and behaviors. Temporally integrated practical wisdom should support hope since it enhances one's sense of agency and predictive control and increases expectations about the positive effectiveness of current behaviors (Lopez, Pedrotti, & Snyder, 2015, p. 204; see also Tops, Boksem, Quirin, IJzerman, & Koole, 2014). Thus, a centered person is likely to remain hopeful with regard to the likelihood of positive future outcomes as a result of current choices. As Aquinas himself notes, the virtue of hope includes a realistic optimism that a difficult, but possible – though not guaranteed – state of affairs will come about at some point in the future (*Summa Theologiae* II-II. Q. 17, A. 1). Thus, being centered for wisdom should also include a proclivity toward a realistic hope with regard to the future.

We also hypothesized that forgiveness should be predicted by the CWA. Recall that being centered for wisdom includes a sense of equanimity that entails a non-judgmental acceptance of self and others. A centered person is also more self-aware and capable of

engaging in an honest and realistic assessment of his or her strengths and weaknesses. This combination of self-awareness and acceptance of oneself and others (that is, equanimity) also tethers one's present-centered awareness to cognizance of the equal value of all persons. This aspect of centering for wisdom is reflected in the levels of pride and shame expressed via the judging mind (the x-asis). Enright (2000) describes forgiveness as a willingness to let go of the just demand for retribution because of others' transgressions or character flaws, accompanied by feelings of positive regard or compassion. We predicted, therefore, that the kind of non-judgmental acceptance of oneself and others cultivated in centering for wisdom would result in an increased proclivity toward forgiveness.

However, we did not think all facets of spiritual well-being would be related to the CWA. Specifically, we posited that one's CWA scores would not necessarily relate to one's strength of general religiosity, defined as beliefs that are bound to religious institutions, communities, or traditions. This may seem surprising at first, given that we noted above the ways in which contemplative practices have frequently derived from many of the world's religious and spiritual traditions. However, there are several reasons why we hypothesized that being centered for wisdom might not be related to religiosity. First, although in most religious traditions there are theoretical connections between basic teachings and beliefs and spiritual practices, it is possible for persons to adhere to the content of a tradition's belief system without a correlative commitment to distinctively contemplative practices. Thus, one could identify as strongly religious (in terms of belief) without also being formed by the kind of contemplative practices that center one for the exercise of practical wisdom. Second, Aquinas and many others in the tradition of virtue ethics account practical wisdom (in Latin, *prudentia*) among the cardinal virtues, which all persons are naturally capable of cultivating through the repeated exercise of

reason and will toward good acts. Therefore, even from within a distinctively theological account of the virtues such as Aquinas's, one may affirm that practical wisdom is accessible to all persons, regardless of their level of religious commitment.[10] Applying this insight to the contemporary context, we could reasonably expect that some persons who practice secular forms of mindfulness could be centered for wisdom, while other persons who are highly religious may not necessarily be engaged in similar practices. We argued that individuals can be centered for wisdom without necessarily having strong beliefs that are tied to religious institutions – especially in light of the overall steady decline in religiosity in the U.S. population in the last four decades (Grant, 2008). Thus, we predicted that the CWA would show evidence of discriminant validity by not being related to general religiosity.

Method

Participants. We had 166 Amazon Mechanical Turk workers participate in our study. For gender make-up, 62% of our participants were male. The majority of participants were U.S. residents (74%), with the rest residing in Asia/Pacific Rim (16%), South and Central America (5%), Europe (3%), Africa (1%), and the Middle East (1%). Most participants (49%) were between the ages of 25 and 34 (20% were between 18 and 24, 17% were between 35 and 44, and 14% were 45 and older). Regarding education level, most participants had either some college (33%) or a Bachelor's degree (44%) (10% had completed high school only and 13% had a Master's degree or high).

Materials. Participants completed several measures, including the CWA, the Freiburg Mindfulness Inventory (FMI) short form, and the Brief Wisdom Screening Screen (BWSS) – all

[10] This is qualified somewhat by Aquinas's assertion that *perfect* virtue is only possible when it is ordered and perfected by the infused theological virtue of charity. He writes that perfect virtues "cannot be without the love of charity." He adds, however, that "it is possible by means of human works to acquire moral [cardinal] virtues, in so far as they produce good works that are directed to an end not surpassing the natural power of the human person: and when they are acquired in this way, they can be without charity" (*Summa Theologiae*, I-II. Q. 65, A. 2).

of which were described in the previous study. Participants also completed the Depression, Anxiety, and Stress Scales 21 (DASS 21) and the English Version of the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB-E)[11].

The DASS 21 was a self-report assessment intended to measure the severity of symptoms of depression, anxiety, and stress for both normal and clinical populations (Antony, Bieling, Cox, Enns, & Swinson, 1998). The DASS 21 consisted of 21 items, with seven items assessing depression, seven measuring anxiety, and seven assessing stress. Participants answered each item using a 4-point scale ranging from 0 ("Never") to 3 ("Almost Always"). Higher scores indicated greater degrees of depression, anxiety, and stress. The internal consistency of the DASS 21 was very good, producing Cronbach alphas ranging from .87 to .92 for the three scales.

The MI-RSWB-E was a self-report measure of spiritual well-being with six sub-scales, three of which we used in this study for the specific variables of religiosity, hope, and forgiveness. We used the General Religiosity, Hope Transcendent, and Forgiveness sub-scales. Each sub-scale consisted of 8 items, all with a 6-point Likert scale ranging from 1 ("Totally Disagree") to 6 ("Totally Agree"). Higher scores reflected greater religiosity, greater hope, and greater forgiveness. The three sub-scales showed good evidence of internal consistency, with their Cronbach alphas ranging from .69 to .97.

Procedure. We administered all measures online via Qualtrics Survey Platform. Participants agreed to participate after reading the Consent Form and then completed the measures in the following order: the CWA, FMI, BWSS, DASS 21, MI-RSWB-E, and demographic questions.

[11] Participants also completed a social desirability measure. Social desirability was significantly correlated with all measures except General Religiosity, gender, age, and education. In our first round of analyses for incremental validity (not reported here; available upon request), we controlled for social desirability – along with age, gender, and mindfulness – in the hierarchical regression models. These analyses produced the same results as those in which we did not control for social desirability (as reported in the Results and Discussion section).

Results and Discussion

In our preliminary analyses, we looked at the measures' descriptive statistics, computing means and standard deviations (see Table 2). We also examined the extent to which three demographic variables (gender, age, and education) were related to the variables in our study. Education was only related to gender and age, with more educated participants tending to be younger and female. Gender was related to religiosity and anxiety such that females were more likely than males to be more religious and less anxious (see Table 2). Age was related to two different variables: the CWA and anxiety (see Table 2). Older individuals were more likely to have lower CWA scores (i.e., being more centered for wisdom) and lower anxiety scores. Because gender and age were related to three of our variables, we included these two demographic variables in our hierarchical regression analyses for incremental validity.

The CWA's internal consistency was good, with the overall Cronbach alpha being .74. Cronbach alphas for each of the four subscales were the following: avoidance = .64, attachment = .69, pride = .70, and shame = .73. As in the previous study, the CWA showed evidence of both convergent and concurrent validity, with the CWA being significantly related to mindfulness and wisdom in predicted directions (see Table 2). Additionally, the CWA shows discriminant validity in that it is not related to religiosity.

For evidence of incremental validity, we conducted a series of hierarchical regressions to see if centering for wisdom predicted the following psychological variables above and beyond that of mindfulness: wisdom, hope, forgiveness, depression, anxiety, and stress. In the first step of the hierarchical regressions, we entered the two demographic variables (age and gender) as control variables. Mindfulness was then entered as the second step, followed by the CWA in the third and final step.

Results produced solid evidence of incremental validity. The CWA explained a statistically significant additional amount of variance over and above mindfulness in all six dependent variables. Specifically, the CWA explained an additional 5% (b* = -.23, $p < .01$) of the variance in wisdom; an additional 10% (b* = -.33, $p < .001$) in hope; an additional 9% (b* = -.33, $p < .001$) in forgiveness; an additional 19% (b* = .46, $p < .001$) in depression; an additional 23% (b* = .52, $p < .001$) in anxiety; and an additional 23% (b* = .52, $p < .001$) in stress.

General Discussion and Conclusion

The three empirical studies all provide evidence of validity, suggesting that our new assessment indeed measures the construct of centering for wisdom. In Study 1, experts' analysis of the CWA produced evidence of content validity. Both Studies 2 and 3 produced evidence of reliability (specifically internal consistency), convergent validity (with the CWA being related to mindfulness) and concurrent validity (with the CWA being related to wisdom). Evidence of discriminant validity was seen in Study 3 such that the CWA was not related to religiosity. Also in Study 3, evidence of incremental validity was produced with the CWA predicting wisdom, hope, forgiveness, depression, anxiety, and stress even after statistically controlling for mindfulness, age, and gender.

The overall purpose of this study was to test, improve, and validate that CWA scores provide an accurate assessment of test-takers' relative strength of their cognitive and emotional reactions to cues in their internal and external environments, indicating areas where they are most likely to be drawn away from their center of wisdom. In addition, we sought to verify the claim outlined in the theoretical foundations section that being centered for wisdom is supportive of both mindful awareness and an enhanced capacity to exercise practical wisdom. Our initial evidence garnered through these first three empirical studies do indeed suggest that the CWA is

measuring a distinctive construct of human awareness that is closely related to both mindfulness and the exercise of the virtue of practical wisdom. Further evidence is provided by regression analyses that indicate that the CWA predicts certain qualities that we would expect as a result of the combination of being centered and cultivating an enhanced capacity for exercising the virtue of practical wisdom above mindfulness alone. These qualities included a propensity for hope and forgiveness, and a decreased proclivity for stress, anxiety, and depression.

We acknowledge a few limitations of our study. First, all data were self-report, raising the possibility of mono-method bias, which could partially account for our expected correlational results. Second, the design of our construct validity studies were all correlational, which do not directly support the causal relationships implied in the CWA's theoretical foundation – namely that contemplative practices cultivate wisdom and more specifically that CWA scores should be influenced by contemplative practices, which should in turn increase wisdom. A more direct and robust test of these causal relationships would be to produce evidence of pretest-posttest validity combined with predictive validity. For example, in a pretest-posttest design, a group of participants would learn (and regularly practice thereafter) contemplative practices, with participants' posttest CWA scores being lower than their pretest scores. Participants' wisdom should also be influenced by the contemplative practices intervention, with their posttest (but not pretest) scores predicting their level of wisdom, measured at some future point (e.g., 6 months after the posttest).

Additional studies, beyond that mentioned in the previous paragraph, should also be conducted to further bolster the CWA's validity evidence and utility. Evidence of distinct groups could be ascertained, comparing individuals who regularly engage in contemplative practices to those who do not, showing the former groups' scores being significantly lower than the latter. It

would also provide helpful data to compare CWA results between persons who practice contemplative forms of centering for wisdom in secular, non-religious contexts and those who do so within distinctively religious, spiritual, or theological contexts. Such data could be compared to empirical evidence from Wacholtz and Pargament (2005) who indicate that when meditation is practiced within distinctively spiritual contexts it tends to provide greater benefits than meditation in purely secular contexts. Finally, it would also be necessary to develop norms for the CWA in order to generate interpretable individual profiles. Norms would greatly add to the utility of the CWA, particularly when being used for educational purposes, which was the original practical intent of the instrument.

In sum, our new CWA shows exciting potential. The measure has strong theological, philosophical, and psychological theoretical foundations. We have accumulated compelling evidence of reliability and validity thus far, demonstrating CWA's internal consistency as well as its content, concurrent, convergent, discriminant, and incremental validity. Although further studies may continue to refine our understanding of the results of the CWA, the evidence garnered thus far indicates that it is already a reliable tool for those seeking to enhance mindful self-awareness and to leverage contemplative practices toward cultivating greater practical wisdom. We believe it to be a fitting tool for use in pedagogical settings in higher education, as it was originally designed to do. It could also prove helpful in any context where participants are seeking greater moral or spiritual formation or leadership development. Such contexts could include workshops or seminars introducing participants to contemplative practices or teaching them to deepen a contemplative practice. It may also prove useful for leadership development programs for individuals who are charged with important decision-making roles in their organizations, and one-on-one career or life coaching or spiritual direction. In a world

desperately in need of wise leadership and decision-making that benefits all people and the common good – including our planet and natural environment – we hope that the CWA can make a small contribution to enhancing this virtue of contemplative practical wisdom.

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Table 1

Correlations among the Measures and their Means and Standard Deviations in Construct Validity Study 1

	1	2	3
1. CWA	--	-.55***	-.44***
2. Mindfulness		--	.75***
3. Wisdom			--
Mean (SD)	2.78 (0.45)	2.67 (0.61)	3.52 (0.53)

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

Table 2

Correlations among the Measures and their Means and Standard Deviations for Construct Validity Study 2

	1	2	3	4	5	6	7	8	9	10	11	12
1. CWA		-.32***	-.41***	.01	-.30***	-.32***	.51***	.51***	.52***	-.04	-.21**	-.03
2. Mindfulness			.62***	.09	.09	.19*	-.28***	-.09	-.19*	.14	.09	.01
3. Wisdom				.03	.17*	.27**	-.44***	-.32***	-.44***	.08	.09	.05
4. Religiosity					.05	.30***	.12	.18*	.12	.16*	.08	-.02
5. Hope						.33***	-.14	-.32***	-.24**	-.06	.07	-.06
6. Forgiveness							-.22**	-.23**	-.28***	.15	-.09	-.12
7. Depression								.69***	.70***	-.10	-.09	.02
8. Anxiety									.76***	-.17*	-.21**	.14
9. Stress										-.09	-.13	.01
10. Gender											.04	-.20*
11. Age												.19*
12. Education												
Mean (SD)	2.73	2.67	3.56	3.30	3.58	3.95	0.66	0.54	0.77	1.38	2.29	2.61

	(0.37)	(0.48)	(0.48)	(1.75)	(0.85)	(1.23)	(0.71)	(0.64)	(0.63)	(0.49)	(1.01)	(0.88)

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

The lowest and highest possible values for the CWA and wisdom were 1.00 and 5.00. Mindfulness's highest and lowest possible values were 1.00 and 4.00. Depression, anxiety, and stress had lowest and highest possible values of 0.00 and 3.00. Religiosity, hope, and forgiveness all had lowest and highest possible values of 1.00 and 6.00. For gender, males were coded as 1 and females as 2. Age had five categories: 1 = 18 to 24, 2 = 25 to 34, 3 = 35 to 44, 4 = 45 to 54, and 5 = 55+. Education also had five categories: 1 = high school diploma or GED, 2 = some college completed, 3 = Bachelor's degree, 4 = Master's degree, and 5 = doctoral degree.

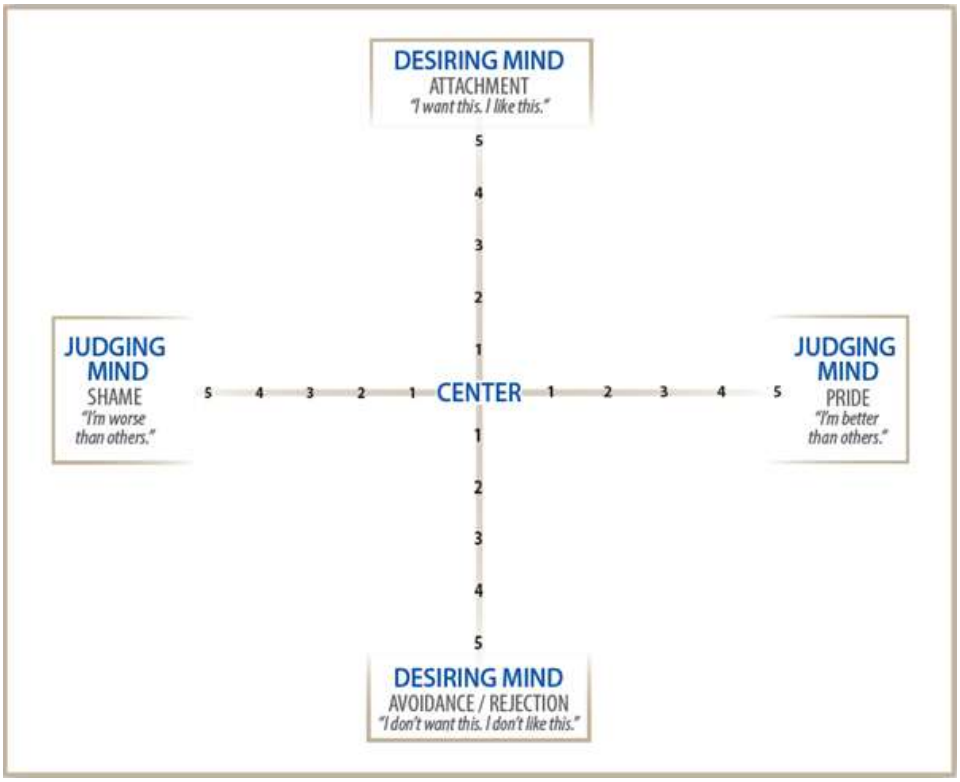

Figure 1. Kite graph of the CWA. The graphic is courtesy of Valerie Boyd (boydesign@comcast.net) and used with permission.

Appendix

The CWA's Items Listed by Sub-scale

Avoidance sub-scale

In my work (as an employee or student) I enjoy taking risks by trying new or innovative approaches to solving problems. *

I try to avoid situations where I have not been successful.

I enjoy taking risks by trying new activities or seeking out novel experiences. *

I try to avoid situations (in school or at work) in which I am afraid of failure, especially if the results may be seen by others.

I am most comfortable following procedures or behaviors that have worked well in the past for me or others.

I experience anxiety in large crowds or social gatherings where I do not know many people.

I withdraw from intimate relationships with others (family members, friends, sexual partners, etc.) because I feel anxious, vulnerable, or inadequate.

Attachment sub-scale

I spend time thinking about or searching for things that I would like to purchase or possess.

I become irritable or distracted when I am unable to satisfy cravings for foods or behaviors that I find pleasurable (e.g., caffeine, chocolate, snack foods, smoking, alcohol, drugs, etc.).

I find myself daydreaming when I am trying to remain focused on other tasks that need to be completed.

I experience cravings for foods or behaviors that I find pleasurable.

I engage in fantasies (sexual or otherwise) about pleasurable events I want to occur.

Pride sub-scale

I enjoy competitive situations where I can prove myself better than others.

I do my best work in order to show that I am more skilled than others.

I dislike being the center of attention. *

When people don't notice me, I start to feel bored or irritated.

I like to talk about the ways in which I have been successful.

I do things to try to get others to notice me.

Shame sub-scale

I believe I am worthy of love and respect. *

I feel jealous of others’ successes or good work.

I talk to myself in a way that is critical or judgmental toward myself or my work.

I feel regret about my past choices and actions.

I talk to myself in a way that is encouraging or supportive when facing personal or professional obstacles. *

I am able to accept compliments about the quality of my work from supervisors, parents, teachers, or coaches. *

I feel like I could never measure up to the successes or good qualities I see in others.

I find myself dwelling upon past failures.

* Reversed item