

MINDFULNESS AND MENTORING: FOCUSING ATTENTION FOR  
EFFECTIVE AND SATISFYING MENTORING RELATIONSHIPS

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The purpose of the current study was to determine if mindfulness predicted successful mentoring relationships. More specifically, this study examined whether trait mindfulness predicted effective mentoring, satisfying mentoring, receipt of mentoring functions, and dysfunctional mentoring experiences after controlling for positive and negative affect. Results show that mindfulness predicted receipt of psychosocial mentoring functions and less dysfunctional mentoring experiences. However, mindfulness did not predict effective mentoring, satisfying mentoring, and career-related mentoring functions. Theoretical and practical implications are discussed along with limitations and suggestions for future research.



MINDFULNESS AND MENTORING: FOCUSING ATTENTION FOR  
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## MINDFULNESS AND MENTORING: FOCUSING ATTENTION FOR EFFECTIVE AND SATISFYING MENTORING RELATIONSHIPS

Mentoring has been studied for decades and has become increasingly popular in organizational research. Mentoring is a developmental relationship that can occur in organizational, educational, or community settings. However, there is limited research on what makes mentoring relationships successful. Specifically, little is known about individual differences, such as personality traits, as they relate to successful mentoring relationships (Wanberg, Welsh, & Hezlett, 2003).

Mindfulness is a way of focusing attention on the present moment. Most mindfulness studies have focused on clinical populations (Shapiro, Carlson, Astin, & Freedman, 2006), using mindfulness meditation to help patients with pain, stress, and anxiety (Kabat-Zinn, 1982; 1993). However, mindfulness is thought to be relevant to literature addressing how individuals focus their attention in the workplace (Dane, 2010). The present study examined how this form of focused attention relates to effectiveness and satisfaction of mentoring relationships. Currently, no known research connects mindfulness to mentoring relationships. This study intends to add to this gap in the literature by investigating the relationship between mentoring and trait mindfulness.

### **Overview of Mindfulness**

Mindfulness is an ancient concept with deep roots in Buddhist psychology (Brown, Ryan, & Creswell, 2007). Mindfulness meditation was first introduced and empirically studied by Jon Kabat-Zinn (1982). Mindfulness meditation emphasizes the observation of moment-to-moment experiences. This is achieved by concentrating on one primary object, such as one's own breathing, and then expanding the field of objects gradually to include all physical and mental

experiences as they occur. While mindfulness research began with mindfulness meditation, more recently mindfulness practices have been conceptualized as sets of skills that can be taught independently of meditation (Baer, Smith, & Allen, 2004).

Dane's (2010) article provides a theoretical framework for the importance of mindfulness in the workplace. Specifically, Dane's article develops theory on the task performance effects of mindfulness. The presented model shows wide external attentional breadth mediated by dynamic task environment and wide internal attentional breadth mediated by task expertise. Wide external attentional breadth is linked to task performance based on previous findings showing that obtaining an abundance of information is beneficially to task performance. Additionally, external awareness may decrease errors occurring due to missed environmental clues. These findings are exceptionally important in dynamic environments where performance depends on environmental information (ie. lawyers in court). Wide internal attentional breadth is important for task performance because it may allow individuals to observe phenomena that initiates in the nonconscious system. A particular type of nonconscious phenomena that can facilitate task performance is intuition. Furthermore, the accuracy of intuitions depends on one's task expertise.

Many definitions of mindfulness are presented in current literature. Dane's (2010) article also provides a good review of definitions from various writings on mindfulness. The overarching theme of the many definitions contains three parts. First, Dane conceptualizes mindfulness as a state of consciousness. However, according to Kabat-Zinn (1994), mindfulness is an "inherent human capacity." Individuals can be in this mindful state of consciousness more or less frequently than others. Second, mindfulness is concerned with the present-moment phenomena and not the past or future. Third, mindfulness involves both external and internal

phenomena; more specifically, what happens to us and in us. To summarize, Dane defines mindfulness as a “state of consciousness in which attention is focused on present-moment phenomena occurring both externally and internally” (2010, p.1001).

Mindfulness definitions can also be categorized by two other components: self-regulation of attention and nonjudgmental awareness (Bishop et al., 2004). An important difference between this definition and Dane’s conceptualization is the introduction of nonjudgmental awareness. Brown and Ryan (2003) define mindfulness as “being attentive to and aware of what is taking place in the present” (p.822). Awareness is the registration of stimuli through the senses and attention is “taking notice” of or “turning toward” the object. We quickly make a cognitive or emotional reaction to stimuli, characterizing an object as ‘good’ or ‘bad’, relating it to a past experience, and assimilating it into existing cognitive schemas. Mindfulness is a receptive state where observed facts are registered impartially. Brown and Ryan also argue that mindfulness is a unidimensional construct and that acceptance is contained in the capacity to concentrate on the present moment (2004).

Brown and Ryan (2003) also agree with Kabat-Zinn in that mindfulness is a universal capacity, although the trait may differ between people. Meaning some individuals may naturally be more mindful than others and vice versa. Brown and Ryan suggest that trait mindfulness predicts autonomous activity in everyday life, while state mindfulness is related to momentary positive affect and experience. In addition, trait mindfulness is thought to predict state mindfulness due to the basic definition of a trait (i.e., the propensity to act in a particular way).

Baer, Smith, Hopkins, Krietemeyer, and Toney (2006), however, believe mindfulness to be a multidimensional construct based on several current descriptions of mindfulness. One description comes from dialectical behavior therapy (DBT; Dimeff & Lineham, 2001), which is

an integration of standard cognitive behavior therapy (CBT) and mindfulness practices. DBT breaks down the meditation process and encourages the use of mindfulness skills in everyday activities. Mindfulness within DBT is conceptualized by six elements broken into two categories, what one does: observing, describing, and participating, and how one does it: nonjudgmentally, one-mindfully, and effectively. Another description comes from Segal, Williams, and Teasdale's (2002) mindfulness-based cognitive therapy for depression stating,

In mindfulness practice, the focus of a person's attention is opened to admit whatever enters experience, while at the same time, a stance of kindly curiosity allows the person to investigate whatever appears, without falling prey to automatic judgments or reactivity. (pp. 322-323)

For the purpose of this study, trait mindfulness was examined using Brown and Ryan's 2003 definition, paying attention to and being aware of what is presently taking place. This is the only known definition to conceptualize mindfulness as a trait. In addition, the definition only differs slightly from the measure that will be used to assess trait mindfulness in this study (discussed in the next section as well as in the methods section of this paper). Nonjudging is believed to be an inherent part of observing by Brown and Ryan (2003) whereas in the measure nonjudging will be measured explicitly as a facet of mindfulness.

### **Measures of Mindfulness**

Brown and Ryan (2003) developed the Mindful Attention Awareness Scale (MAAS). This scale measures dispositional mindfulness, or the presence or absence of attention to and awareness of what is occurring in the present. They began with a pool of 184 items and used experts to narrow down the items before conducting an exploratory factor analysis. The measure

derived for subsequent studies contains 15 items. Items are scored on a 6-point response scale and combined for a single total score.

The Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Walach, 2001) was designed for use with experienced meditators. The 30-item scale assesses nonjudgmental present-moment observation and openness to negative experience. Items are scored on a 4-point response scale and the authors suggest interpreting it using a single total score. A validation study on the FMI (Walach, Buchheld, Buttenmüller, Kleinknecht, & Schmidt, 2006) found that a robust short 14 item version correlated almost perfectly with the full scale.

The Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2004) measures the general tendency to be mindful in daily life and is based largely on the DBT conceptualization. It is a 39-item instrument measuring four elements of mindfulness: observing, describing, acting with awareness, and accepting without judgment. Items are scored on a 5-point response scale and a total score is generated for each of the four elements.

The Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Hayes & Feldman, 2004) measures several elements of mindfulness in general daily experiences. There are 12 items which are scored on a 4-point response scale. Although several elements are measured: (a) attention, (b) awareness, (c) present-focus, and (d) acceptance/nonjudgment with respect to thoughts and feelings (as determined by CFA); the scale yields only a single total score due to medium to large first-order factor covariances.

The Mindfulness Questionnaire (MQ; Chadwick, Hember, Mead, Lilley, & Dagnan, 2005) assesses a mindful approach to distressing thoughts and images. All 16 items begin with “Usually, when I have distressing thoughts or images” and continue with a mindfulness related

response. Items are scored on a 7-point response scale and while four aspects are represented: (a) mindful observation, (b) letting go, (c) nonaversion, and (d) nonjudgment; the authors found that a unidimensional factor structure best fit the data.

Baer et al. (2006) conducted a factor analysis of the MAAS, FMI, KIMS, CAMS, and MQ. The analysis yielded 5 factors: (a) nonreactivity to inner experience, the tendency to allow thoughts and feelings to flow freely without becoming wrapped up in or carried away by them; (b) observing, attending to or noticing internal and external experiences; (c) describing, assigning words to internal experiences; (d) acting with awareness, attending to the activities of the present moment, the opposite of acting in “automatic pilot”; and (e) nonjudging of inner experiences, not evaluating thoughts and feelings. Baer argues that the best conceptualization of mindfulness is a multifaceted construct due to construct clarification and incremental validity issues. Findings support the conceptualization of mindfulness as a multifaceted construct.

Baer et al. (2008) then tested the construct validity of the Five Facet Mindfulness Questionnaire (FFMQ). Alpha coefficients for all facets ranged from .72 to .92, indicating an adequate-to-good internal consistency. The variance in each facet accounted for by its relationship with the other facets is represented by adjusted  $R^2$ . These values ranged from .24 to .41, suggesting that although the facets are intercorrelated, each facet is distinct. Four of five facets were found to be related to meditation experience. Acting with awareness was not related to meditation. Acting with awareness was related to education and in expected directions with symptoms and well-being. In addition, the CFA showed significant loadings for this facet on the mindfulness construct. The only facet not found to be a clear indicator of an overarching mindfulness construct was observing. The observing facet was moderately and positively related to several maladaptive constructs. Results suggest that the observing facet may be sensitive to

changes with meditation practice that alter its relationship with other variables. This was the first study to support that meditation practice leads to mindfulness, which in turn leads to well-being. The present study will use the FFMQ to assess trait mindfulness and will be further discussed in the Method section of this paper.

### **Findings on Mindfulness**

Although mindfulness is an ancient Buddhist teaching, its research in Western society is still relatively new (Dane, 2010). Due to mindfulness's new place as a scientific construct, many individuals may not be aware of or may be skeptical of mindfulness's effects. Therefore, this section will summarize many of the findings from mindfulness studies on healthy populations.

Advances in neuroscience have shown that mindfulness causes changes in the brain, which result in increased self-regulation and accepting emotions. By using functional Magnetic Resonance Imaging (fMRI) studies researchers have shown that people high in mindfulness are less reactive to threatening emotional stimuli as measured by amygdala activation (Creswell, Way, Eisenberger & Lieberman, 2007). Another study using fMRI found that individuals higher in mindfulness predicted lower perceived rejection (Eisenberger, Lieberman & Williams, 2003).

The majority of mindfulness literature examines clinical populations and, therefore, is mostly concerned with individuals with mental and physical health issues, such as severe depression or cancer. However, there is little research on mental health relating to mindfulness in non-clinical populations. A meta-analysis conducted by Chiesa and Serretti (2008) examined the efficiency of Mindfulness-Based Stress Reduction (MBSR; a 6-week mindfulness meditation training program created by Kabat-Zinn) interventions on stress reduction in healthy subjects. Only ten articles passed the authors' criteria and were included in the analysis. The results suggest that MBSR has an indirect and possibly a direct effect on stress reduction.

Relationships have also been found between mood and personality and mindfulness. In her meta-analysis, Giluk (2009) found neuroticism to have a large negative correlation with mindfulness, while negative affect had a moderate negative correlation, and conscientiousness and positive affect showed moderate positive correlations with mindfulness. Brown and colleagues (2003, 2007) found higher extroversion and openness to experience to relate to mindfulness. Brown et al. (2007) also found trait mindfulness to be related to lower levels of anxiety and depression. In addition, individuals receiving mindfulness induction, compared to those in a control group, were found to recover more quickly from induced sad mood (Broderick, 2005).

### **Mindfulness and Relationships**

A number of characteristics associated with healthy relationships have been shown to be related to mindfulness (Brown & Ryan 2003). Specifically, individuals in positive relationships tend to report high levels of positive affectivity, self-esteem, and life satisfaction. Inverse relationships include negative affectivity, anxiety, anger-hostility, neuroticism, depressive symptoms, and stress reactivity. Mindfulness also relates to the ability to regulate affect (Brown et al., 2007). An intervention study found higher levels of mindfulness to be associated with an increase in self-reported empathy (Shapiro, Schwartz, & Bonner, 1998). Indeed, research has shown that mindfulness is directly related to satisfaction in romantic relationships. Mindfulness has been positively linked to relatedness and interpersonal closeness (Brown & Ryan, 2003). Research has shown that mindfulness promotes attunement and connection in relationships (Kabat-Zinn, 1993; Welwood, 1996). Correlations between mindfulness and components of emotional intelligence have also been found (Baer et al., 2004; 2006; Brown & Ryan, 2003). Additionally, emotional intelligence is associated with better social skills and perspective taking,

cooperative response patterns, and marital partner satisfaction (Schutte, Malouff, & Bobik, 2001). Barnes, Brown, Krusemark, Campbell, and Rogge (2007) conducted a two part study finding that mindfulness was positively related to overall relationship satisfaction. Carson, Carson, Gil, and Baucom (2004) conducted a Mindfulness-Based Relationship Enhancement intervention modeled after Kabat-Zinn's stress reduction mindfulness program which also somewhat resembled traditional cognitive-behavioral couples' programs. The 8-week program was tailored for nondistressed couples. The program increased relationship satisfaction and closeness.

Wachs and Cordova (2007) tested self-reported mindfulness in relation to relationship satisfaction and emotion repertoire skill. "Mindful relating holds that an open and receptive attention to the present moment (mindfulness) promotes a more accepting and less experientially avoidant orientation to challenging emotions such that more responsive and relationally healthy modes of responding become possible" (p. 464). With existing research showing the relationship between mindfulness and emotion regulation, mindfulness may be an effective mechanism for changing attachment style in relationships that is trainable. Being in close proximity to your thoughts and feelings allows you to become more comfortable with them. It is possible through meta-cognitive awareness to observe your thoughts and feelings apart from yourself. Individuals who frequently exist in a more mindful state are more likely to better control their emotions and therefore, should be better able to identify, manage, and communicate emotional content in their relationships. The study found a significant correlation between mindfulness and global marital adjustment. Also, mindfulness was related to the improved ability to identify and communicate emotions and the ability to appropriately handle anger.

Similar to Brown et al. (2007), I argue that these findings suggest that mindfulness may enhance professional relationships as well as personal relationships. Duck (2007) stated that the major difference between workplace and intimate relationships are that workplace relationships are more instrumental, less discretionary, and shorter in duration. This leaves a lot of overlap in the two types of relationships. In addition, emotional intelligence and empathy can lead to a better understanding of others; helping employees cooperate with supervisors, co-workers, and subordinates as well as enhance customer service orientation.

### **Overview of Mentoring**

Mentoring is a developmental relationship between a less experienced individual (the protégé) and a more experienced individual (the mentor). These relationships can occur in organizational, educational, or community settings. The importance of mentoring relationships has been discussed for decades. Levinson stated that “the mentor relationship is one of the most complex, and developmentally important, a man can have in early adulthood” (1978, p.97). Mentors may serve a variety of functions, including teacher, sponsor, host and guide, exemplar, and counselor. Early research on mentoring suggests that mentors are critical to support and facilitate individuals’ life goals and dreams.

In early mentoring research, Kram (1983) studied 18 pairs of managers involved in developmental relationships. All relationships were in one of four stages. The first stage of the mentoring relationship is initiation. In this stage the relationship is started and can be characterized by the senior manager being admired and respected by the young manager. This stage usually lasts from six to twelve months. The second stage is cultivation and usually lasts from two to five years. During this stage the range of support the mentor gives to the protégé expands to maximum and both individuals discover the real value of relating to one another. The

third stage is separation. At this point the nature of relationship is altered due to organizational changes or psychological changes within one or both individuals and the value of the relationship is reassessed. The final stage is redefinition, this is where the relationship evolves into a significantly different form or ends.

Wanberg et al. (2003) conducted a review of current research on mentoring. Understanding the outcomes of mentoring is key when explaining the practical implications of mentoring research. In regard to protégé outcomes, research is mostly consistent (for exceptions, see Eby, Butts, Durley, & Ragins, 2010; Eby, Butts, Lockwood, & Simon, 2004) that being a protégé offers positive outcomes. A meta-analysis by Allen, Eby, Poteet, Lentz, and Lima (2002) gives an overview of protégé outcome research, showing that mentoring is positively related to both subjective and objective career outcomes. Studies on mentor outcomes rarely focus on the same outcomes as proposed for protégés. Mentor outcomes can be lumped into four categories: builds a support network, self-satisfaction, job-related self-focused, and job-related other focused (Allen, Poteet, & Burroughs, 1997). Also important to consider is organizational outcomes; which include employee integration, reduction in turnover, organizational communication, management development, managerial succession, productivity, and socialization (Zey, 1984).

Although mentoring has been a popular area of study in organizational research for over two decades, little research on predictors of successful mentoring relationships have been examined. The first step in a successful mentoring relationship is the basic initiation of the relationship. Some of the personality traits that motivate individuals to seek mentors include: high extraversion, high self-monitoring, Type A personality, and high self-esteem (Wanberg et al., 2003). Also, there is a negative relationship with negative affectivity and motivation to seek

mentoring. In addition, a limited amount of research has shown that need for achievement, need for power (Fagenson, 1992), and job involvement (Aryee & Chay, 1994) differentiate employees with mentors from employees without; individuals higher on these traits tend to be the ones with mentors. A study by Turban and Dougherty (1994) investigated whether individual personality characteristics influenced initiation of mentoring relationships. They found that individuals with an internal locus of control, high self-monitoring, and emotional stability were more likely to initiate mentoring relationships and therefore, receive more mentoring.

In addition to mentoring relationship initiation, some research has been done on protégé receipt of mentoring functions. Kram (1985) summarized mentoring functions into two categories: career functions and psychosocial functions. Career functions involve learning and career advancement; these include sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments. Psychosocial functions help develop the self-worth of the individual and include role modeling, acceptance and confirmation, counseling, and friendship. Within the literature of protégé characteristics and mentoring received, some meaningful relationships have been found with regard to protégé personality traits (Wanberg et al., 2003). Higher extraversion, greater self-esteem, less negative affectivity, and Type A personality are linked to receiving more mentoring functions. Wang, Tomlinson, and Noe (2010) also studied protégés' internal locus of control, as well as the mentor's trust of the protégé, and protégé' reported received mentoring functions. The study found internal locus of control to be significantly correlated to protégé reported career-related support and role modeling, and affect-based trust to be significantly correlated to reported career-related support, psychosocial support, and role modeling.

## **Overview of Dispositional Affect**

Two variables that are seen repeatedly in both mindfulness and mentoring research are positive and negative affect. Dispositional affect is the overall propensity to react to situations in stable, predictable ways (Barsade & Gibson, 2007). Positive affect is an individual's tendency to experience positive moods and is described by feelings of enthusiasm, high energy, and attentiveness (Watson, Clark, & Tellegen, 1988). Negative affect is an individual's tendency to experience negative moods and is described by guilt, fear, anger, and nervousness. These two dimensions are independent and do not represent the opposite of the other (Watson & Tellegen, 1985). Strong relationships have been found between positive affect and extraversion, and negative affect and neuroticism (Costa & McCrae, 1980; Meyer & Shack, 1989). Some researchers have suggested that positive and negative affectivity are interchangeable with extraversion and neuroticism (Adler & Matthews, 1994; George, 1996; Tellegen, 1985), while others have argued that they are sub-categories of these traits (Costa & McCrae, 1980; Watson & Walker, 1996). Tellegen (1985) argued that traits correlated to extraversion promote a tendency towards positive mood, whereas traits correlated to neuroticism promote a tendency to negative mood experiences.

## **The Present Study**

Previous research has examined predictors of mentoring relationships; however, mindfulness has not been examined as a predictor of successful mentoring relationships. The present study looked at trait mindfulness and how it relates to successful mentoring relationships. Many of the same personality traits that relate to mindfulness (Brown et al., 2003; 2007; Giluk, 2009) also relate to initiation of mentoring relationships and provision of mentoring functions (Wanberg et al., 2003). Traits that are positively related to mindfulness and mentoring include:

positive affect, extroversion, and self-esteem. Negative affect relates negatively to mindfulness, mentor initiation, and mentoring functions. In addition, mindfulness relates to lower levels of anxiety, depression, and stress (Brown et al., 2007); mentoring relationships are more likely to be effective if the individuals involved are not distracted by psychosomatic symptoms. Emotional intelligence has been linked to satisfaction in marital relationships, better social skills, perspective taking, and cooperative response patterns (Schutte et al., 2001) as well as mindfulness (Baer et al., 2004; 2006; Brown & Ryan, 2003). These skills can be easily transferrable into mentoring relationships. Relatedness, interpersonal closeness (Brown & Ryan, 2003), and empathy (Shapiro et al., 1998) have also been linked to mindfulness. These concepts are important for establishing a trusting mentoring relationship that will offer both career and psychosocial support. Furthermore, mindfulness helps individuals respond to stressful events in a calmer manner (Creswell et al., 2007; Wachs & Cordova, 2007), which is especially important for employees who are working in fast-paced, dynamic work environments that tend to be very stressful.

An important test of the relationship between mindfulness and successful mentoring relationships is how much incremental validity mindfulness adds to the prediction of mentoring relationships above and beyond other notable individual differences. For this paper, I chose to examine how much variance mindfulness can explain above and beyond protégé positive affect and negative affect. Because positive and negative affect represent the overall way in which individuals respond to situations, and because both are linked to better mentoring relationships, they represent broad, inclusive predictors of mentoring relationships. As such, showing that mindfulness predicts mentoring relationships above and beyond positive and negative affect will be a strong test to see if mindfulness adds incremental validity.

Additionally, it is important to examine multiple indicators of successful mentoring relationships. The participants, protégés, were assessed on their level of trait mindfulness as well as the success of the mentoring relationships that they are involved in. In this paper I propose that the individuals exhibiting higher levels of trait mindfulness will report more successful mentoring relationships. Following mentoring theory and best practice, I examined multiple perspectives on mentoring relationship, looking at protégé perceptions of effective mentoring, satisfying relationships, receipt of career and psychosocial functions, and dysfunctional mentoring. First, effective mentoring is defined as how much the protégé learns from the mentoring relationship.

*Hypothesis 1:* Protégé trait mindfulness relates to perceptions of effective mentoring relationships above and beyond protégé positive and negative affect.

Second, satisfying relationships represent the protégé's affective reaction to the mentoring relationship. In other words, satisfaction depends on the extent to which the protégé likes his or her mentor and their relationship.

*Hypothesis 2:* Protégé trait mindfulness relates to perceptions of satisfying mentoring relationships above and beyond protégé positive and negative affect.

Career and psychosocial functions show how much support the mentor is providing to the protégé.

*Hypothesis 3:* Protégé trait mindfulness relates to perceived receipt of career and psychosocial mentoring functions above and beyond protégé positive and negative affect.

Finally, dysfunctional mentoring is comprised of four negative mentoring experiences, including when the mentor is highly supervising, highly controlling, shows difficulties allowing the protégé to have relationships with others, and discourages independent work.

*Hypothesis 4:* Protégé trait mindfulness relates to less perceived dysfunctional mentoring experiences above and beyond protégé positive and negative affect.

## **Method**

### **Procedure**

This study was conducted through Qualtrics, an online survey instrument. Participants were presented with an informed consent form at the beginning of the survey. This form notified participants that they were not obligated to complete the survey and may stop at any point. The first scale the participants were presented with was the Typical Mentor Scale (Appendix C). Second, participants responded to the Mentoring Functions Scale (Appendix D). Third was the Dysfunctional Mentor Scale (Appendix E). Next was the FFMQ (Appendix B) and finally the PANAS (Appendix F). The survey took approximately 10 minutes to complete. No identifying information was collected and all responses were completely confidential. The data were downloaded into SPSS for statistical analyses.

### **Participants**

Participants were recruited using a variety of online methods. Emails were sent out to personal contacts and two psychology related list serves and the link was posted on Facebook. All of these messages asked possible participants to please forward the survey to family, friends, and co-workers. It is unknown how many possible participants were reached. In addition, the survey was included in the psychology department student participant database for a .25 credit for eligible participants (those reporting that they were currently or have previous been involved in a workplace mentoring relationship). A total of 230 participants responded to the survey. Of these participants, 41 reported never having been involved in a mentoring relationship. These participants were not included in the analysis. Another 47 participants were not included in the analysis due to incomplete responses. This left 142 valid responses that were analyzed.

The mean age of participants was 28.29 years ( $SD = 10.22$ ), 57 (40.1%) were male, and 114 (80.3%) were Caucasian/White. The mean reported tenure at participant's current organization was 4.05 years ( $SD = 5.34$ ).

## Measures

**Five Facet Mindfulness Questionnaire.** Mindfulness was measured using a 39-item scale developed by Baer et al. (2006). The instrument is based on a factor analysis of five independently developed mindfulness questionnaires. The five facets assessed are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. Example items from each facet are "When I do things, my mind wanders off and I'm easily distracted" (reverse scored item, acting with awareness), "I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing" (observing), "I can easily put my beliefs, opinions, and expectations into words" (describing), "I disapprove of myself when I have irrational ideas" (reverse scored item, nonjudging), and "I watch my feelings without getting lost in them" (non-reactivity). A response scale ranging from 1 (*Never or Very Rarely True*) to 5 (*Very Often or Always True*) was used (see Appendix B). As previously stated, for exploratory purposes this study will compare the results of using a composite score versus the five facets. Past research found internal consistency to be adequate-to-good for the five facets, ranging from .72 to .92 (Baer et al., 2008). In this study an alpha of .89 was found for the composite score, .81 for observe, .91 for describe, .88 for awareness, .90 for nonjudge, and .73 for nonreact.

**Typical mentor scale.** Mentoring effectiveness and satisfaction will be measured using the 10-item typical mentor scale from Allen and Eby (2003). The original measure was written in the mentor's perspective and was altered for the current study to the protégé's perspective. A sample item from this scale is "My protégé and I enjoyed a high-quality relationship." A Likert

response scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) will be used (see Appendix C). A coefficient alpha of .80 was reported in past studies. In the present study an alpha of .90 was found.

**Mentoring functions scale.** Mentoring functions were measured using Noe's (1988) scale that was developed on the basis of previously identified career and psychosocial functions. It was necessary to re-word some of the items as the scale was originally written for educators. The 21-item scale is scored on a 5-point response scale ranging from 1 (*To a very slight extent*) to 5 (*To a very large extent*) (see Appendix D). Coefficient alphas were .89 and .92 for career-related and psychosocial functions, respectively. In the current study, career-related functions had an alpha of .85 and psychosocial functions had an alpha of .91.

**Dysfunctional mentor scale.** Dysfunctional mentoring experiences will be measured using the 8-item dysfunctional mentor scale from Eby et al. (2004). A sample item from this scale is "My mentor approaches tasks with a negative attitude." A Likert response scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) was used (see Appendix E). A coefficient alpha of .90 was found in past studies. The current study reports an alpha of .96.

**The PANAS.** Positive and negative affect will be measured using Watson et al.'s (1988) scale. The PANAS is a widely used self-report instrument containing 10 items for positive affect and 10 items for negative affect. The items are scored on a 5-point response scale ranging from 1 (*Very Slightly or Not at All*) to 5 (*Extremely*) (see Appendix F). Coefficient alpha ranged from .86 to .90 for positive affect and from .84 to .87 for negative affect in previous studies. An alpha of .89 for positive affect and an alpha of .88 for negative affect was found in the current study.

## **Results**

Descriptive statistics and correlations of all study variables can be seen in Table 1. All variables, except for career functions, were found to be significantly related to mindfulness. In particular, effective mentoring relationships, satisfying mentoring relationships, and receipt of psychosocial mentoring functions were all positively related to mindfulness. Dysfunctional mentoring experiences were negatively related to mindfulness.

Table 1

*Descriptive Statistics and Correlations for All Study Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Effective	3.98	.62												
2. Satisfying	4.09	.66	.72*											
3. Psychosocial	3.65	.74	.62*	.65*										
4. Career	3.44	.85	.46*	.49*	.60*									
5. Dysfunctional	1.72	.90	-.31*	-.34*	-.45*	-.14								
6. PA	3.67	.64	.33*	.28*	.24*	.26*	-.09							
7. NA	2.02	.66	-.11	-.21*	-.17*	.02	.29*	-.33*						
8. Mindfulness	3.41	.43	.25*	.27*	.29*	.06	-.29*	.48*	-.56*					
9. Observe	3.28	.63	.17*	.15	.18*	.00	-.13	.23*	-.16	.52*				
10. Describe	3.68	.74	.24*	.24*	.25*	.09	-.17	.37*	-.30*	.73*	.32*			
11. Awareness	3.44	.71	.13	.19*	.14	.03	-.29*	.42*	-.41*	.60*	.00	.25*		
12. Nonjudge	3.46	.80	.03	.07	.13	-.06	-.14	.17	-.51*	.64*	-.01	.24*	.42*	
13. Nonreact	3.14	.61	.23*	.20*	.22*	.17*	-.14	.32*	-.27*	.52*	.42*	.38*	-.01	.08

\* =  $p < .05$

A hierarchical regression was conducted to test the hypotheses of the current study. Two regressions were run for each hypothesis, one using a composite score of mindfulness and one using the five facets, to see if mindfulness predicted successful mentoring relationships. More specifically, ten regression analyses tested whether mindfulness predicted effective mentoring relationships, satisfying mentoring relationships, receipt of mentoring functions, and dysfunctional mentoring experiences. Positive affect and negative affect were entered in as control variables in all analyses because it is important to test how much incremental validity mindfulness adds to the prediction of mentoring relationships above and beyond other notable individual differences. Then, mindfulness, either composite or the five facets, was entered into the regression analysis as the second step. A .05 criterion of statistical significance was employed for all tests.

### **Composite Score Regressions**

In Hypothesis 1 perceptions of effective mentoring relationships were examined. After controlling for positive and negative affect, mindfulness was entered as a composite score and the change in the overall model was not statistically significant,  $\Delta R^2 = .01$ ,  $\Delta F(1, 138) = 2.09$ ,  $p = .15$ . As such, Hypothesis 1, that mindfulness would predict effective mentoring relationships, was not supported. Beta weights for each step of the regression using the composite score of mindfulness can be seen in Table 2.

Table 2

*Hierarchical Regression Analysis Using Mindfulness as a Composite Score.*

Variables	Effective mentoring			Satisfying mentoring			Psychosocial functions			Career functions			Dysfunctional experiences		
	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$	$R^2$	$F$	$B$	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$
Step 1	.11	8.28*		.10	7.40*		.06	4.77*		.08	5.98*		.08	6.13*	
PA			.32*			.24*			.20*			.30*			.01
NA			-.01			-.13			-.10			.12			.29*
Step 2	.12	6.26*		.11	5.55*		.10	4.95*		.08	4.00*		.11	5.63*	
PA			.27*			.19*			.12			.31*			.08
NA			.06			-.07			.01			.10			.19
Mindfulness			.15			.14			.24*			-.04			-.22*

\* =  $p < .05$

Satisfaction of mentoring relationships was looked at in Hypothesis 2. After controlling for positive and negative affect, mindfulness was entered as a composite score and the change in the overall model was not statistically significant,  $\Delta R^2 = .01$ ,  $\Delta F(1, 138) = 1.78$ ,  $p = .19$ . Therefore, Hypothesis 2, that mindfulness would predict satisfying mentoring relationships, was not supported.

In Hypothesis 3 perceived receipt of mentoring functions were examined. First psychosocial functions were examined. After controlling for positive and negative affect, mindfulness was entered as a composite score and the change in the overall model was statistically significant,  $\Delta R^2 = .03$ ,  $\Delta F(1, 138) = 5.04$ ,  $p < .05$ . Mindfulness explains a significant increase in psychosocial functions,  $\beta = .24$ ,  $t(138) = 2.25$ ,  $p < .05$ . Secondly, career-related functions were examined. After controlling for positive and negative affect, mindfulness was entered as a composite score and the change in the overall model was not statistically significant,  $\Delta R^2 = .01$ ,  $\Delta F(1, 138) = .11$ ,  $p = .75$ . Consequently, Hypothesis 3, that mindfulness would predict receipt of mentoring functions, was only partially supported. Psychosocial functions were significantly related to mindfulness whereas career-related functions were not.

Dysfunctional mentoring experiences were examined in Hypothesis 4. After controlling for positive and negative affect, mindfulness was entered as a composite score and the change in the overall model was statistically significant,  $\Delta R^2 = .03$ ,  $\Delta F(1, 138) = 4.35$ ,  $p < .05$ . Mindfulness decreased the presence of dysfunctional mentoring experiences,  $\beta = -.22$ ,  $t(138) = -2.09$ ,  $p < .05$ . As a result, Hypothesis 4, that mindfulness would inversely predict dysfunctional mentoring experiences, was supported.

### **Post Hoc Analyses: Five Facets of Mindfulness**

In addition to examining the composite of mindfulness, post hoc analyses were conducted to see if the specific facets of mindfulness (i.e., observing, describing, acting with awareness, nonjudging, and nonreacting) were statistically significant predictors of effective mentoring, satisfying relationships, career and psychosocial functions, and dysfunctional mentoring. Table 3 shows beta weights for each step of the regression using the five facets of mindfulness. In Step 2 of the regression on effective mentoring relationships a significant change is not seen,  $\Delta R^2 = .03$ ,  $\Delta F(5,134) = .925$ ,  $p = .47$ . No significant change was seen in satisfying mentoring relationships in Step 2,  $\Delta R^2 = .03$ ,  $\Delta F(5,134) = .843$ ,  $p = .52$ . Also, no significant change was seen in Step 2 of psychosocial functions,  $\Delta R^2 = .04$ ,  $\Delta F(5,134) = 1.26$ ,  $p = .29$ , or career-related functions,  $\Delta R^2 = .03$ ,  $\Delta F(5,134) = .793$ ,  $p = .56$ . In addition, a significant change was not detected in Step 2 of dysfunctional experiences,  $\Delta R^2 = .07$ ,  $\Delta F(5,134) = 2.09$ ,  $p = .07$ . In sum, using the individual five facets of mindfulness in the regression equation, Hypotheses 1 through 4 were not supported.

Table 3

*Hierarchical Regression Analysis Using the Five Facets of Mindfulness.*

Variables	Effective mentoring			Satisfying mentoring			Psychosocial Functions			Career Functions			Dysfunctional experiences		
	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$	$R^2$	$F$	$\beta$
Step 1	.11	8.28*		.10	7.40*		.06	4.77*		.08	5.98*		.08	6.13*	
PA			.32*			.24*			.20*			.30*			.01
NA			-.01			-.13			-.10			.12			.29*
Step 2	.14	3.02*		.12	2.70*		.11	2.27*		.11	2.26*		.15	3.31*	
PA			.25*			.15			.12			.29*			.15
NA			.03			-.11			-.01			.10			.21*
Observe			.04			.04			.07			-.12			-.08
Describe			.10			.11			.12			.02			-.05
Awareness			.02			.09			.03			-.03			-.29*
Nonjudge			-.04			-.08			.05			-.06			.08
Nonreact			.11			.07			.10			.15			-.09

\* =  $p < .05$

## Discussion

Three major findings emerged from the current study. First, mindfulness was significantly related to psychosocial mentoring functions above and beyond positive and negative affect. Second, mindfulness was found to relate to less dysfunctional mentoring experiences above and beyond positive and negative affect. Third, mindfulness was not found to be related to effective mentoring relationships, satisfying mentoring relationships, and career-related mentoring functions when controlling for positive and negative affect.

The first finding from this study indicates that mindfulness is positively related to psychosocial functions. Mindfulness promotes attunement and connection in relationships (Kabat-Zinn, 1993; Welwood, 1996) as well as relatedness and interpersonal closeness (Brown & Ryan, 2003). In addition, Eby et al.'s (2012) meta-analysis on mentoring reports deep-level similarities (similarities in attitudes, values, beliefs, or personality) as antecedents to psychosocial functions. More mindful protégés may be able to recognize similarities to their mentors through awareness. By being aware of their present moment, mindful protégés may pick up on more subtle similarities that others may not notice. In return, mentors may be more likely to notice these similarities as well. Therefore, the protégé and mentor will experience more interpersonal closeness and more psychosocial functions may come naturally. Specifically, psychosocial functions help develop the self-worth of the individual and include role modeling, acceptance and confirmation, counseling, and friendship (Kram 1985). For example, one would expect that individuals sharing more interpersonal closeness would provide more acceptance and confirmation to one another and be more likely to consider their relationship a friendship. Counseling would be going one step further and providing guidance on specific issues. In addition, role modeling may be closely related to deep-level similarities. This behavior is

measured by the protégé's agreement with their mentor's attitudes and values as well as their respect and admiration for their mentor.

The second finding indicates that mindfulness is negatively related to dysfunctional mentoring experiences. Part of nonjudgmental observation is seeing obvious negative events as changeable (Wolever et al., 2012). Through realizing how intention and behavior are formed, individuals recognize that events are unfolding, fluid processes. Therefore, more mindful individuals would report less dysfunctional mentoring experiences because they believe that these experiences can be turned around.

In addition, part of being mindful is knowing what situations to respond to and which to let subside (Bishop et al., 2004). This is important to prevent rumination and elaborative thought streams. Rumination can intensify negative affect and cause fixation on problems (De Lissnyder et al., 2012). Also, rumination has been shown to relate to impairment of problem solving and reduced task performance. Part of mindfulness practice as originally described in detail by Kabat-Zinn (1990) states that when attention waivers from the breath the individual must acknowledge and accept the thoughts and then let them go. This is essential for remaining in the here and now due to limited resources of the mind. Individuals higher in trait mindfulness would be more likely to let these negative experiences go and not consider them when asked such as they were in this survey.

Furthermore, it is possible that more mindful individuals are in fact encountering fewer negative mentoring experiences because they are involved in healthier relationships. This idea is further supported by the first finding that mindfulness predicts psychosocial functions. These individuals are able to find personal similarities and use them to develop a strong interpersonal relationship with acceptance and confirmation, counseling, and friendship.

Third, this study found that effective mentoring, satisfying mentoring, and career-related mentoring functions were not significantly related to mindfulness. The results for effective mentoring and satisfying mentoring were in the expected direction, showing a positive relationship with mindfulness. It is possible that a difference in mindfulness was not seen due to a strong relationship with positive affect which may be caused by the general nature of the items that make up both effective mentoring and satisfying mentoring. In addition, the items were worded in the past tense whereas all other scales were in the present tense. The switching of tenses may cause confusion.

Career-related mentoring functions showed a small negative beta. Career functions may not be related to mindfulness because they are future oriented. Career functions include exposure to influential individuals and challenging opportunities; these are not necessarily present moment phenomena. In addition, career functions were the only variable in this study that is not directly related to the self or the mentor (dysfunctional). Specially, the items address behaviors by the mentor such as reducing risks and delegating assignments. The items direct attention away from the participant.

Post-hoc analyses were done to determine if the five facets of mindfulness would produce similar results as the mindfulness composite score. Unexpectedly, no individual facets were statistically significant after controlling for positive and negative affect. However, one facet did show a significant beta; dysfunctional mentoring experiences were negatively related to acting with awareness. This finding may provide further support to the reasoning that mindful individuals are more likely to not dwell on negative experiences when deciding what events to act on. Acting with awareness is the opposite of being on “automatic pilot”; it involves acknowledging all activities occurring in the present moment (Baer et al, 2008). Once all

activities are acknowledged the individual can determine which situations need to be attended to and which can be let go. While a less mindful individual acting on “automatic pilot” may be more likely to respond to a negative event making the situation worse, a more mindful individual would be more likely to let the situation dissipate. However, no variables other than dysfunctional experiences showed significant results when the facets were entered into the regression. This is due to the facets being highly correlated with one another.

One strength of this study was controlling for positive and negative affect. This was done to test the incremental validity of mindfulness. By doing so, the significant differences that were seen can be more strongly attributed to mindfulness and not individual disposition. Since mindfulness predicted both psychosocial mentoring functions and dysfunctional mentoring experiences above and beyond positive and negative affect, a conclusion can be drawn that these changes did not happen just by chance. While the other mentoring variables, effective mentoring, satisfying mentoring, and career-related mentoring functions, were shown to be related to mindfulness in the correlation analysis, they were not found to be predicted by mindfulness above and beyond positive and negative affect.

It is important to note that in the regression analyses, positive affect was found to be a predictor of all positive mentoring outcomes (effective mentoring, satisfying mentoring, psychosocial mentoring functions, and career-related mentoring functions). In addition, negative affect was found to be a predictor of negative mentoring outcomes (dysfunctional mentoring experiences). Previous research on mentoring has noted that negative affectivity is inversely related to receipt of mentoring functions and initiation of mentoring relationships (Wanberg et al., 2003). Individuals higher in negative affectivity are more likely to avoid stress and tension caused by the challenging assignments that mentoring would provide (Turban & Dougherty,

1994). In addition, research has found that extraversion is positively related to the receipt of more mentoring functions and initiation of mentoring relationships (Wanberg et al., 2003). Such strong relationships have been found between positive affect and extraversion (Costa & McCrae, 1980; Meyer & Shack, 1989) that some researchers believe that positive affectivity is a secondary trait under extraversion (Costa & McCrae, 1980; Watson & Walker, 1996). However, these specific mentoring outcomes have not been previously linked to positive and negative affect.

### **Theoretical Implications**

Mindfulness is still a relatively new construct in organizational literature. The current study hypothesized that mindfulness would predict effective mentoring, satisfying mentoring, receipt of mentoring functions, and dysfunctional mentoring experiences after controlling for positive and negative affect. Findings show that mindfulness predicts receipt of psychosocial mentoring functions and negatively predicts dysfunctional mentoring experiences. These findings have important implications for theory. First, it shows that mindfulness is a strong predictor of psychosocial mentoring functions and dysfunctional mentoring experiences. Second, it suggests that mindfulness is positively correlated to effective mentoring, satisfying mentoring, and psychosocial functions, and negatively correlated to dysfunctional mentoring experiences. These findings help advance mindfulness research in organizations by showing that mindfulness can help create more positive mentoring relationships in the work environment. Additionally, the post hoc analyses suggest that mindfulness should be measured as a composite score rather than five facets. The inter-correlations of the five facets causes redundancy in the model and therefore fewer significant results are seen.

## **Practical Implications**

Research on mindfulness suggests that organizations may benefit from mindfulness programs. Mindfulness is related to conscientiousness (Giluk, 2009), emotional intelligence (Baer et al., 2004; 2006; Brown & Ryan, 2003), and lower levels of anxiety and depression (Brown et al, 2007). One recent study has been conducted on stress reduction using mindfulness-based techniques in the workplace (Wolever et al., 2012). When compared to a control group the study found that those receiving the intervention showed improvements in perceived stress, sleep quality, and heart rate variability. Employee stress is related to productivity losses, higher health care costs, poor morale, absenteeism, and high turnover. Furthermore, the study found that virtual classroom mindfulness programs were just as successful as face-to-face mindfulness programs and in fact the virtual class experienced less attenuation. This may provide a more cost effective alternative for mindfulness interventions in the organizational environment.

In addition, current findings suggest that mindfulness could be beneficial for building better work relationships. Receiving more psychosocial support and encountering less dysfunctional experiences can translate into other work relationships not just mentoring. When employees have healthy relationships with their supervisors, co-workers, and subordinates communication is more effective. This can lead to improved productivity, higher job satisfaction, and lower turnover intentions.

## **Limitations**

There were a few limitations to this study. First, this study had a small sample size. This can cause low statistical power. In addition, a small sample size makes it difficult to generalize the results to the population. As with any study, results should be replicated to provide further

interpretation of the results. Second, the data were cross sectional. This means that causality cannot be determined. A longitudinal design would provide more solid results. Theoretical rationale has been presented to suggest the predictive relationship of mindfulness on successful mentoring; although, it may be possible that successful mentoring relationships cause individuals to be more mindful. Third, all of the measures in this study were self-report. This may result in social desirability biases and possibly inflate variable correlations. Finally, the typical mentoring scale, from which the effective mentoring and satisfying mentoring variables were derived, was the only scale that was worded in the past tense. This switch in tenses may have affected the participants' responses.

### **Future Research**

This study found that more mindful individuals were less likely to report dysfunctional mentoring experiences. This raises additional questions. Specifically, whether mindful individuals do not recall negative events due to non-elaborative awareness; or whether these individuals do not perceive the events to be negative due to non-judgmental awareness. In other words, do individuals not even know that a negative event has occurred, or do they see the negative event as changeable. Another possibility is that more mindful individuals are actually involved in healthier relationships. Also, future research should look at mindfulness in relation to other negative workplace experiences. For example, would more mindful individuals be less negatively affected by lay-offs within their organization than less mindful individuals. It is important for employee well-being to minimize the negative events employees experience at work. Since it is not always possible to prevent these negative events from happening it may be beneficial to provide employees with the personal skills to better handle these experiences.

Future research on how mindfulness affects workplace outcomes should include a mindfulness intervention. Very few mindfulness interventions have been done in the workplace and no known workplace interventions have measured mentoring relationships. This would create not only a longitudinal design but also provide further support for mindfulness programs in the workplace. In addition, pairing a mindfulness intervention with an already established mentoring program could produce more substantial results.

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## Appendix A: IRB Approval Form



### EAST CAROLINA UNIVERSITY

#### University & Medical Center Institutional Review Board Office

1L-09 Brody Medical Sciences Building · Mail Stop 682

600 Moyer Boulevard · Greenville, NC 27834

Office **252-744-2914** · Fax **252-744-2284** · [www.ecu.edu/irb](http://www.ecu.edu/irb)

### Notification of Exempt Certification

From: Social/Behavioral IRB  
To: [Krystle Swartz](#)  
CC: [Lisa Baranik](#)  
Date: 1/23/2012  
Re: [UMCIRB 11-001292](#)  
MINDFULNESS AND MENTORING

I am pleased to inform you that your research submission has been certified as exempt on 1/22/2012. This study is eligible for Exempt Certification under category #Exempt # 2.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will

need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

## Appendix B: Five Facet Mindfulness Questionnaire (FFMQ)

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- \_\_\_\_\_ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- \_\_\_\_\_ 2. I'm good at finding words to describe my feelings.
- \_\_\_\_\_ 3. I criticize myself for having irrational or inappropriate emotions.
- \_\_\_\_\_ 4. I perceive my feelings and emotions without having to react to them.
- \_\_\_\_\_ 5. When I do things, my mind wanders off and I'm easily distracted.
- \_\_\_\_\_ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- \_\_\_\_\_ 7. I can easily put my beliefs, opinions, and expectations into words.
- \_\_\_\_\_ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- \_\_\_\_\_ 9. I watch my feelings without getting lost in them.
- \_\_\_\_\_ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- \_\_\_\_\_ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- \_\_\_\_\_ 12. It's hard for me to find the words to describe what I'm thinking.
- \_\_\_\_\_ 13. I am easily distracted.
- \_\_\_\_\_ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- \_\_\_\_\_ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- \_\_\_\_\_ 16. I have trouble thinking of the right words to express how I feel about things.
- \_\_\_\_\_ 17. I make judgments about whether my thoughts are good or bad.
- \_\_\_\_\_ 18. I find it difficult to stay focused on what's happening in the present.
- \_\_\_\_\_ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- \_\_\_\_\_ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- \_\_\_\_\_ 21. In difficult situations, I can pause without immediately reacting.
- \_\_\_\_\_ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- \_\_\_\_\_ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- \_\_\_\_\_ 24. When I have distressing thoughts or images, I feel calm soon after.
- \_\_\_\_\_ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- \_\_\_\_\_ 26. I notice the smells and aromas of things.
- \_\_\_\_\_ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- \_\_\_\_\_ 28. I rush through activities without being really attentive to them.
- \_\_\_\_\_ 29. When I have distressing thoughts or images I am able just to notice them without reacting.

- \_\_\_\_\_ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- \_\_\_\_\_ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- \_\_\_\_\_ 32. My natural tendency is to put my experiences into words.
- \_\_\_\_\_ 33. When I have distressing thoughts or images, I just notice them and let them go.
- \_\_\_\_\_ 34. I do jobs or tasks automatically without being aware of what I'm doing.
- \_\_\_\_\_ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- \_\_\_\_\_ 36. I pay attention to how my emotions affect my thoughts and behavior.
- \_\_\_\_\_ 37. I can usually describe how I feel at the moment in considerable detail.
- \_\_\_\_\_ 38. I find myself doing things without paying attention.
- \_\_\_\_\_ 39. I disapprove of myself when I have irrational ideas.

### Facets

Observe items:

1, 6, 11, 15, 20, 26, 31, 36

Describe items:

2, 7, 12R, 16R, 22R, 27, 32, 37

Act with Awareness items:

5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Nonjudge items:

3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Nonreact items:

4, 9, 19, 21, 24, 29, 33

## Appendix C: Typical Mentoring Scale

### *Items measuring relationship quality*

- The mentoring relationship between my mentor and I was very effective.
- I am very satisfied with the mentoring relationship my mentor and I developed.
- I effectively utilized my mentor.
- My mentor and I enjoyed a high-quality relationship.
- Both my mentor and I benefited from the mentoring relationship.

### *Items measuring relationship learning*

- I learned a lot from my mentor.
- My mentor gave me a new perspective on many things.
- My mentor and I were “co-learners” in the mentoring relationship.
- There was reciprocal learning that took place between my mentor and I.
- My mentor shared a lot of information with me that helped my own professional development.

## **Appendix D: Mentoring functions scale**

1. Mentor has shared history of his/her career with you.
2. Mentor has encouraged you to prepare for advancement.
3. Mentor has encouraged me to try new ways of behaving in my job.
4. I try to imitate the work behavior of my mentor.
5. I agree with my mentor's attitudes and values.
6. I respect and admire my mentor.
7. I will try to be like my mentor when I reach a similar position in my career.
8. My mentor has demonstrated good listening skills in our conversations.
9. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
10. My mentor has shared personal experiences as an alternative perspective to my problems.
11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.
14. My mentor has conveyed feelings of respect for me as an individual.
15. Mentor reduced unnecessary risks that could threaten the possibility of advancement.
16. Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.
17. Mentor helped you meet new colleagues.
18. Mentor gave you assignments that increased written and personal contact with influential people.
19. Mentor assigned responsibilities to you that have increased your contact with people who may judge your potential for future advancement.
20. Mentor gave you assignments or tasks in your work that prepare you for advancement.
21. Mentor gave you assignments that present opportunities to learn new skills.

## **Appendix E: Dysfunctional mentor scale**

### *General Dysfunctionality*

- 1) My mentor has a bad attitude
- 2) My mentor is bitter toward the organization.
- 3) My mentor has personal problems (e.g., drinking problem, marital problems).
- 4) My mentor tends to bring his/her personal problems to work.
- 5) My mentor approaches tasks with a negative attitude.
- 6) My mentor complains a lot about the organization.
- 7) My mentor has a pessimistic attitude.
- 8) My mentor allows non-business related issues to interfere with his/her work.

## Appendix F: The PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally feel this way, that is, how you feel on the average. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

<input type="checkbox"/> interested	<input type="checkbox"/> irritable
<input type="checkbox"/> distressed	<input type="checkbox"/> alert
<input type="checkbox"/> excited	<input type="checkbox"/> ashamed
<input type="checkbox"/> upset	<input type="checkbox"/> inspired
<input type="checkbox"/> strong	<input type="checkbox"/> nervous
<input type="checkbox"/> guilty	<input type="checkbox"/> determined
<input type="checkbox"/> scared	<input type="checkbox"/> attentive
<input type="checkbox"/> hostile	<input type="checkbox"/> jittery
<input type="checkbox"/> enthusiastic	<input type="checkbox"/> active
<input type="checkbox"/> proud	<input type="checkbox"/> afraid

