

A MINDFUL SERVICE: A SELF-REGULATION  
THEORY VIEW OF THE EFFECT OF MINDFULNESS  
ON CUSTOMER ORIENTATION

By

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To my father who has lived mindfully; and my mother who, when I asked her advice on starting this Ph.D. program, told me the Noah Arc story; and to my daughter who has always been my keen cheerleader.

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Title of Study: A MINDFUL SERVICE: A SELF-REGULATION THEORY VIEW OF  
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Abstract: Mindfulness, a non-elaborative and non-judgmental quality of consciousness, has been repeatedly conceptualized based on the concept of self-regulation of attention to thoughts and emotions. The present study investigates whether the mindfulness trait relates to customer orientation. It also investigates if this relationship is mediated through the personality factors conscientiousness and neuroticism. Study 1 is a cross-sectional study of a sample of 309 service employees recruited through Amazon's Mturk. Results of Study 1 support the full mediation model with conscientiousness and neuroticism as mediators.

To investigate the causality of the model in Study 2, I conduct a 14-day mindfulness intervention on a sample of 29 service workers (control and treatment groups). Results of the mixed ANOVA show a statistically significant and strong increase in mindfulness, customer orientation, conscientiousness, self-control, and decrease in neuroticism. Study 2 provides additional support for the causal model. The managerial application, contributions, and future directions for research are discussed.

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## CHAPTER I

### INTRODUCTION

*“...human being is a guest house. Every morning there is a new arrival. A joy, a depression, a meanness, some momentary awareness comes as an unexpected visitor...welcome and entertain them all...”* *Rumi*

A Google search for the mindfulness concept returns more than 35 million results. A Google Scholar search of mindfulness and work returns more than 92,000 results. Thousands of clinical and nonclinical studies have investigated (and supported) the effectiveness of mindfulness for anxiety, depression, mood disorder, and ADHD. The American Mindfulness Research Association (AMRA) lists about 40 newly published mindfulness-related research studies each month.

Mindfulness is defined as experiencing the present moment as it is happening now, intentionally and nonjudgmentally (Kabat-Zinn, 1982). Observations of the effectiveness of mindfulness for the treatment of many psychological disorders such as anxiety and depression have exponentially increased research in the area of mindfulness and its benefits (Chiesa & Serretti, 2010). Despite this, there is a gap in the literature about workplace mindfulness research. After two decades of clinical studies of mindfulness benefits in the psychological treatment of individuals, literature on workplace mindfulness has just started (Dane, 2011; Glomb et al., 2011). Improvements in self-regulation at work can be achieved through targeted mindfulness

training that develops skills to respond to emotional distress and increases attention and presence in the moment and on the task (Kabat-Zinn et al., 1998).

It is important to distinguish between trait and state mindfulness. Unfortunately, few literatures in mindfulness have distinguished between the two (Bishop et al., 2004; Brown & Ryan, 2003; Hülshager et al., 2013). Hülshager et al. (2013) make this distinction clear by pointing to the state-like variances in mindfulness in the population of untrained people. Their study also shows that natural mindfulness variance is related to the psychological well-being of non-meditating individuals. Other scholars also take notice that mindfulness is also a “psychological state” that changes (Allen & Kiburz, 2012; Bishop et al., 2004). A single session of mindfulness practice (e.g., meditation) as short as 15 minutes can enhance a mindfulness state in an individual (Thompson & Waltz, 2007), but this is not the case for trait mindfulness.

A newer stream of research addresses mindfulness in the workplace – its effectiveness on employee outcomes and work performance factors (Glomb et al, 2011). Given the benefits of mindfulness on the psychology of individuals, targeted mindfulness training programs would be a tool to deal with work-related issues (Burgoon, Berger, & Waldron, 2000).

Self-regulation theories, particularly emotional regulation and the concepts of deep and surface acting in service employees, support the effect of emotional labor on employees who are in direct contact with customers (Grandey, 2000; Gross, 1998). Emotional labor may tax the employee’s resources in dealing with everyday challenges of service by depleting the ability to control thoughts, emotions, and behaviors (Baumeister et al., 2006). Given the emotional labor associated with direct customer service roles (Gross, 1998), mindfulness training may be particularly effective in helping service employees cope with the stress associated with customer service (Hülshager, 2013).

In the present study, I define service marketing as a profession in which an employee is directly in contact with customers – face-to-face or online. As such, service marketing specifically is a complex mix of factors such as ambiguity, immediacy, human perception, interconnectedness, and dynamism. Customer orientation, as one of the most important factors affecting performance in

service marketing (Brown et al., 2003), influences market orientation and organizational success (Kotler, 1997; Narver & Slater, 1990) and customer satisfaction (Rust, Zahorik, & Keiningham, 1996). Customer orientation is often defined as “an employee’s tendency or predisposition to meet customer needs in an on-the-job context” (Brown et al., 2002, p. 111). It has become increasingly vital to recognize factors affecting the customer orientation of service employees.

My primary question is how mindfulness might help an employee relate to customers and to provide better customer orientation. Although a body of literature has examined the relationship between basic personality factors (Barrick, Mount, & Judge, 2001) and job-related factors such as customer orientation (Barrick & Mount, 1991, 1993; Brown et al., 2002; Hertz & Donovan, 2000) as well as personality and mindfulness (Giluk, 2009), no study has examined the relationship between the mindfulness trait and customer orientation. Moreover, no literature has hypothesized the basic personality factors that explain the link between mindfulness and customer orientation. As a way to address this hypothesis, I use a cross-sectional study to test the hypothesized model. I also use a mindfulness training tool to demonstrate how mindfulness can improve customer orientation.

Mindfulness-based training tools such as Mindfulness Based Stress Reduction (Kabat-Zinn, 1990; Grossman et al., 2004) have been used in clinical psychology since the 1970s to cure chronic pain, depression, and anxiety. Other mindfulness-based tools have also been introduced – Mindfulness Based Cognitive Therapy (MBCT) (Segal, Williams, & Teasdale, 2002), Dialectical Behavior Therapy (Linehan, 1993a), and Acceptance and Commitment Therapy (Hayes, 2004) – to improve overall well-being, emotional regulation, and coping with distress (Grossman et al., 2004). A common feature of these methodologies is rigorous meditation training designed to enhance the mindfulness trait/state in an individual (Bishop et al., 2004), which might be hard for employers to afford.

Despite the widespread use of and demonstrated effectiveness of mindfulness in medical interventions and therapies, the benefits of enhanced mindfulness do not stop at therapeutic methods. Glomb et al. (2011) obtained a positive correlation between mindfulness and employee resilience and

job performance, physical and psychological health, self-regulation of emotions, and overall well-being (Glomb et al., 2011). Hülshager et al. (2013) found a negative relationship between mindfulness and emotional exhaustion in a sample of 219 employees. They also examined their model using an intervention with 64 individuals randomly assigned to the treatment and control groups to support their findings.

The Big Five Personality Factors neuroticism and conscientiousness consistently demonstrate significant correlations with mindfulness (Giluk, 2009); however, the magnitude of effect sizes vary. For instance, the standardized estimated effect size for neuroticism ranges from -0.28 to -0.58 (Giluk, 2009). Although neuroticism has been repeatedly reported in the literature, Giluk (2009) shows that researchers shy away from reporting the estimated effect of conscientiousness and mindfulness based on the fact that she obtained only seven studies in her meta-analysis for conscientiousness, compared to 10 and more for other personality factors. She claims that researchers might not see a natural theoretical relationship between mindfulness and conscientiousness, the type they see in the relationship of mindfulness and other personality factors such as neuroticism. In this study, I examine the nature of such relationships to help in filling this theoretical gap.

To provide guidance in planning the study, I conducted a pilot study that revealed a moderately strong relationship between conscientiousness and mindfulness ( $r = 0.22$ ) and neuroticism and mindfulness ( $r = -0.29$ ). In the pilot study, I originally tested the effect of all five basic personality factors (Barrick et al., 2001) on customer orientation. Eventually a re-specified causal model revealed that the mediated effect of mindfulness on customer orientation happens partially through neuroticism and conscientiousness.

In addition to this early empirical evidence for a relationship between conscientiousness, neuroticism and mindfulness, there is a theoretical link as well. Barrick et al. (2001) explain how the facets of personalities in the conscientious and neurotic individuals are opposites and how they affect job-related performance. Conscientious employees are those upon whom others can depend. They follow rules, are in control of their behavior, and protect other people's interests like their own

(Barrick et al., 2001). They also have high self-discipline (Costa & McCrae, 1992) and the ability to judge a situation clearly and respond effectively (Costa & McCrae, 1992; Kabat-Zinn, 1990).

In contrast, neurotic individuals are associated with anxiety and insecurity; the lack of self-regulation of emotions and thoughts (Costa & McCrae, 1992) make them less efficient in exerting self-discipline, self-control, clear judgement, and proper responses, leading the individual to unsatisfactory task performance (Barrick & Mount; 1991; Heaven et al., 2001). Mindfulness practice provides these individuals with a great deal of self-regulation and self-discipline; as such, neurotic individuals respond especially well to mindfulness training (Kabat-Zinn & Hanh, 2009), leaving them more in control of their emotions, less anxious, and more dependable. In the same manner, mindfulness training should be positively related to conscientiousness.

In addition, research demonstrates that conscientiousness is positively related to customer performance and training performance (Hunter & Hunter, 1984; Mount & Barrick, 1995; Barrick et al., 2001). Therefore, if mindfulness training is expected to influence the conscientiousness of individuals by enhancing their self-regulation of attention to their thoughts and emotions, it might also influence job-related factors positively.

The present study anticipates that higher mindfulness (between individual variance) and an enhanced mindfulness trait acquired through our mindfulness training program (within individual variance) targeted at service employees – especially frontline employees – will alleviate the neurotic tendencies in these individuals and enhance their conscientiousness. Building my theory on self-regulation theory (Baumeister et al., 2006), I anticipate that an enhanced mindfulness trait might help service workers to manage their neuroticism by regulating their emotions, behavior, and mood. The improved self-regulation from mindfulness training should also improve conscientiousness because, according to the literature, self-regulation is a facet of conscientiousness (Costa & McCrae, 1992). Less neurotic, more conscientious employee who have acquired higher self-regulation strength might be more capable of meeting customer needs (Baumeister et al., 2006). Once they recognize customer

needs, they have a greater tendency to fulfill those needs with more enjoyment, leading to a better customer orientation (Brown et al., 2002).

To evaluate the extent to which mindfulness can create changes in personality, this study will use a mindfulness training intervention and compare personality changes to a control group that does not complete the training. The study will provide a two-week intervention program inspired by the Hülshager et al. (2013) program. It is modified to suit to my study in exploring the relationship between mindfulness and customer orientation of service employees. Hülshager et al. (2013) had success with modification of trait mindfulness in a two-week self-help mindfulness meditation program. Their intervention consisted of self-training (through a booklet) meditation and included daily diaries. Intervention in this study is made up of a 10- to 15-minute combination of meditation and reading material, which is repeated in the morning and evening for 14 days. It is facilitated to help participants to stay on the training program with sufficient communication means such as emails, texts, and Skype sessions. Because there is no diary writing and it is monitored through online means – compared to Hülshager et al. (2013) intervention, it is less intense, flexible, and easy to follow. Compared to the Mindfulness Based Stress Reduction tool (MBSR) (Kabat-Zinn, 1982) and other interventions that were originally designed to treat patients, this two-week program is less intense, less time consuming, and more affordable for organizations to train their employees. Ten to 15 minutes per day is more affordable for organizations, including small businesses, and employees can take the training in their own time, reducing person-hour cost to the organization.

### **Research Questions**

- Does an online, two-week mindfulness intervention enhance the mindfulness trait in service employees?
- Does a higher mindfulness trait as result of mindfulness training or difference in individuals lead to a better customer orientation of service employees?

- Do neuroticism and conscientiousness mediate the relationship between the mindfulness trait and the customer orientation of service workers?

This paper contributes to the body of literature on mindfulness in the service marketing in several ways.

- It explores the potential for mindfulness to explain variance in the construct of customer orientation.
- It contributes to the mindfulness literature by demonstrating how neuroticism and conscientiousness mediate the relationship between mindfulness and customer orientation.
- It provides managers with a two-week, less than 20-minutes-per-day training tool to enhance service employee's customer orientation.
- It provides evidence of possible change in some facets of the personality traits using self-regulation theory.

## CHAPTER II

### REVIEW OF LITERATURE

#### **Mindfulness and Mindfulness Training**

Mindfulness is defined as being immersed in the experience of now, what is happening now, free from past and future judgments (Kabat-Zinn, 1994). Although people have different levels of trait mindfulness, mindfulness is a skill that can be learned and improved (e.g., Sibinga & Wu, 2010). Bishop et al. (2004, p. 234) offer an operationalized definition of mindfulness as “a process of regulating attention in order to bring a quality of non-elaborative awareness to current experience and a quality of relating to one’s experience within an orientation of curiosity, experiential openness, and acceptance.”

Kabat-Zinn and Hanh (2009) list attitudes resulting from mindfulness training as patience, beginner’s mind (openness and lack of bias), trust, not being judgmental, acceptance, and letting go (detachment). They also add to this list the quality of being “non-striving,” which means not losing sight of what is unfolding now because of future goals.

Mindfulness-based interventions and practices were developed based on Buddhist meditation techniques (Nhat Hanh, 1975). Mindfulness training is not about relaxation or changing a feeling or thought; it is about paying attention to these feelings and thoughts as well as acknowledgement of their specific sensation in the body (Bishop et al., 2004). Meditation and other mindfulness-based trainings can teach employees mindfulness skills; once mastered, one can continue practicing these skills on their own (Bishop et al., 2004).



Mindfulness-enhancing meditation, as one of techniques used in mindfulness training, usually starts with individuals sitting upright in a comfortable position with closed eyes. They are encouraged to bring their attention to sensations of their breathing. Whenever distractions occur, individuals are encouraged to take notice of the distracting thoughts or feelings without any elaboration or judgment. This means if an individual feels anger, instead of looking for the source of the anger or questioning the emotion, he/she just takes notice of the sensations in the body and lets that feeling surface and possibly pass. Repetition of this practice will increase the individual's ability to manage such thoughts and feelings in real life scenarios. Mindfulness exercises can be compared to exercising muscles in the body.

In modern psychology, mindfulness may be used to increase an employee's "awareness" and his/her ability to manage emotions, thoughts, and behaviors. This can be achieved through skills to respond to emotional distress and resulting behaviors (Kabat-Zinn et al., 1998) acquired through mindfulness training. Observations of the effect of mindfulness for the treatment of many psychological disorders such as anxiety and depression have substantially increased research in this area (Chiesa & Serretti, 2010). One of the most prominent mindfulness-based interventions tested on both patients and nonpatients is "Mindfulness Based Stress Reduction"-MBSR (Kabat-Zinn, 1990). Tens of thousands of people participated in MBSR at the Centre of Mindfulness in the University of Massachusetts alone (Glomb et al., 2011). MBSR is increasingly gaining popularity in the clinical treatment of stress, anxiety, and behavioral disorders (Kabat-Zinn et al., 1998).

Mindfulness-based techniques result in better stress management and overall well-being (Astin, 1997; Shapiro, Schwartz, & Bonner, 1998). The neuroscience literature on mindfulness contains evidence of changes in brain activity and function in an area called the amygdala. The amygdala is a region for the processing of emotions and the fight-or-flight decision center (Arnsten, 2009). Interventions such as MBSR are shown to change the gray matter concentration in the human brain (Holzel et al., 2011). Mindfulness might affect reaction to stress by reducing sympathetic-adrenal-

medullary (SAM) and hypothalamic-pituitary-adrenal (HPA) axis reactivity (Creswell & Lindsay, 2014).

The creation of MBSR increased interest in using mindfulness in clinical therapies (Kabat-Zinn, 1982). Many healthcare professionals have been trained to teach mindfulness-based practices to other healthcare professionals (Duerr, 2004). Mindfulness has also been the foundation of other popular therapy methods such as Dialectical Behavior Therapy (Linehan, 1993a, 1993b), Mindfulness-Based Cognitive Therapy (Teasdale, Segal, & Williams, 1995), Acceptance and Commitment Therapy (Hayes, Strosahl, & Wilson, 1999), and Relapse Prevention (Marlatt, 1985). The majority of these methodologies consist of rigorous meditation training designed to enhance individuals' psychological well-being (Bishop et al., 2004).

### **Trait Versus State Mindfulness**

Mindfulness measures focus on either “state” mindfulness or “trait” mindfulness. State mindfulness (in the words of Thompson and Waltz, 2007, “*mindfulness during meditation*”) refers to the state of awareness of one’s immediate experience. Trait mindfulness, on the other hand, assesses how mindful one is during everyday life. As such, it is a semi-stable trait, comparable to other personality traits. Thompson and Waltz (2007) aptly call this trait “everyday mindfulness.” The distinction between state and trait is not always made in the research literature. It is an important distinction though, because state (but not trait) mindfulness is likely to change quickly as a reaction to interventions (stressful events, brief mindfulness interventions, etc.).

Trait (but not state) mindfulness – being akin to a personality trait – has been shown to relate to other personality traits (Siegling, Petrides, & Martskvishvili, 2014; Thompson & Waltz, 2007; Walsh et al., 2009). Furthermore, while a session of mindfulness meditation as short as 15 minutes can have an immediate effect on the level of state mindfulness, it does not seem to have the same effect on trait mindfulness (Thompson & Waltz, 2007). This is not to say that the mindfulness trait cannot be changed, but individuals may need more than one 15-minute session. The specific number of sessions

it takes to significantly change trait mindfulness is an empirical question that my study tries to answer.

Evidence supports the notion that personality traits might be influenced with mindfulness-based intervention and therapies (e.g., Brown & Ryan, 2003; Thompson & Waltz, 2007). What is not clear is with what means and for how long mindfulness methods need to be applied. Since my focus is on the workplace and customer orientation, my study proposes that a two-week intervention might be long enough to change a service employee's personality traits and customer orientation.

### **Operationalizing Mindfulness**

A body of literature operationalized the construct of mindfulness. Bishop et al. (2004, p. 233) defined mindfulness as “self-regulation of attention, which involves sustained attention, attention switching, and the inhibition of elaborative processing.” They argue (p. 232-236) that the majority of definitions of mindfulness contain these four elements: 1) “self-regulation of attention, 2) orientation to experience, 3) awareness of what is unfolding, 4) non-elaborative and non-judgmental acceptance of what is happening.”

### **Service Employees and Customer Orientation**

Market orientation is defined as “implementation of the marketing concept” (Kohli & Jaworski, 1990, p. 1). Marketing concept is a philosophy in the management of a firm that has three main pillars: 1) customer orientation, 2) profit orientation, and 3) collective acceptance of the importance of marketing for awareness of market needs (McNamara, 1972). Other scholars consider profitability a consequence of customer orientation (Jaworski & Kohli, 1993; Levitt, 1969), ruling out the profit-orientation pillar. While market concept is a philosophy, market orientation is the manifestation of this philosophy in organizations (Jaworski & Kohli, 1993). Kohli and Jaworski (1990, p. 3) define market orientation as “the organization-wide generation, dissemination, and responsiveness to market intelligence.” Market orientation in organizations is associated with higher performance in terms of profitability (Narver & Slater, 1990) and commitment of employees (Jaworski & Kohli, 1993).

There is consensus that customer orientation is the core element of market orientation (Kohli & Jaworski, 1990; Brown et al., 2002). In summary, organizations can achieve their goals by fulfilling customer needs (Kotler, 1997; Desphandeh et al., 1993). There is evidence of a positive effect of customer orientation on market orientation and organizational success (Kotler, 1997; Narver & Slater, 1990). For the purpose of this study, I adopt the Brown et al. (2002, p. 111) definition of customer orientation as “an employee’s tendency or predisposition to meet customer needs in an on-the-job context.” Front-line service employees influence market orientation because of their direct contact with customers. An employee-level attribute such as customer orientation is crucial to a service company’s staying market oriented (Brown et al., 2002) because the direct interaction of service employees is known as the fundamental factor influencing customer satisfaction (Rust et al., 1996).

In the study of factors affecting customer orientation, Brown et al. (2002) found out that out of five personality traits, three (emotional stability, agreeability, and the need for activity) accounted for 39% of variance in employees’ customer orientation. They studied this concept from two distinct dimensions: (1) needs dimension, “an employee’s beliefs about their ability to satisfy customer’s needs” (Saxe & Weitz, 1982); and (2) enjoyment dimension, defined as “the degree to which interacting with and serving customers is inherently enjoyable for an employee.” The present study connects the findings of Brown et al. (2002) to the literature in mindfulness to examine whether mindfulness benefits, which are evident in clinical psychology, improve customer orientation. In doing so, I also examine the possible mediating effect of the basic personality factors that might be positively influenced by mindfulness training.

### **The Mediation of Conscientiousness and Neuroticism**

The personality traits neuroticism and conscientiousness are well studied in the organizational literature (e.g., Barrick et al., 2001). Research in the mindfulness literature has also examined the association between mindfulness and these personality factors (e.g., Giluk, 2009; Brown & Ryan, 2003).

My study focuses on two personality factors: conscientiousness and neuroticism. I focus on these because of their consistent effects on many work-related outcomes (e.g., Hunter & Hunter, 1984; Mount & Barrick, 1995; Brown et al., 2002). Moreover, both conscientiousness and neuroticism have shown consistent correlations with mindfulness (Giluk, 2009). Surprisingly, despite a body of literature showing conscientiousness as a reliable predictor of work-related factors, Brown et al. (2002) did not find a relationship between conscientiousness and customer orientation. The lack of a relationship between conscientiousness and customer orientation might be evidence of a theory gap in that an explaining mechanism might account for the relationship.

Conscientious people are dependable. They follow rules and are responsible (Barrick et al., 2001). They protect other people's interests like their own (Barrick et al., 2001) and are highly self-disciplined (Costa & McCrae, 1992). Conscientious individuals have the ability to judge a situation clearly as well as respond effectively, showing signs of clarity of mind and sound judgment and avoiding an impulsive response to a situation (Costa & McCrae, 1992; Kabat-Zinn, 1990). Mindful people have the ability to see a situation as it is and make decisions based on what is happening in the moment, free from past and future (Kabat-Zinn, 1990). As result similar to the facets of the personality of conscientious individuals, their decisions are effective and targeted (Costa & McCrae, 1992; Kabat-Zinn, 1990). In summary, conscientiousness is associated with self-regulation of thoughts, emotions, and behaviors (Baumeister et al., 2006), seeing a situation clearly and acting without impulse or aggression. It is important to note that self-regulation is a major facet of mindfulness as well (Bishop et al., 2004).

Individuals high in neuroticism are anxious, insecure, not in control of their emotions, impulsive, and susceptible to depression and hostility (Costa & McCrae, 1995). Neuroticism has an inverse relationship with "subjective well-being" (Diener, Suth, Lucas, Smith, 1999), psychological well-being, and mental health (Brown et al. 2007). Neurotic people cannot manage the span of their thoughts and emotions that affect their judgment and decision-making capabilities (Baer, 2003; Brown et al., 2007). Mindfulness, on the other hand, is associated with psychological well-being

(Brown & Ryan, 2003). Mindful individuals have the ability to deal with a range of emotions and thoughts by facing them (Brown, Ryan, & Creswell, 2007). They can regulate their emotions to deal with negative feelings (Bishop et al., 2004).

### **Does Trait Mindfulness Influence Personality?**

Before answering this question, I need to explore a more fundamental question: “does personality change?” This question has been around since William James claimed in his 1890 text, *The Principles of Psychology*, that personality is set in plaster by adulthood. Costa et al. (1994) also implied that personality is rather stable. Since 1994, new studies have challenged this long-standing belief. Heatherton and Weinberger (1994), in the introduction of their book, claim “...the trick is to understand what changes and what does not, when to expect stability and when to expect change, and why these occur as they do.”

Although much of the psychology literature is based on William James’ belief, there has been a shift in the debate over personality change in adulthood since early 1990s. Roberts and Mroczek (2008), through longitudinal and cross-sectional studies, show that personality keeps changing well into adulthood. In their study, people showed more self-control and emotional stability with age. These changes were dominant in young adults.

While the earlier literature considers the personality traits “relatively enduring,” Roberts and Mroczek (2008) challenge this notion. Since 1994, many others also reassessed and challenged the common belief that personality is set in plaster as James claimed in early twentieth century (e.g., Mroczek & Spiro, 2003; Roberts, Walton, & Viechtbauer, 2006; Srivastava, John, Gosling, & Potter, 2003; Mroczek, 2014). Studies also show that change in personality continues well into adulthood; evidence indicates that older adults score higher in conscientiousness and agreeableness and lower in neuroticism, openness, and extroversion compared to the younger sample (Srivastava et al., 2003).

In addition, the literature on mindfulness-based clinical therapies such as Mindfulness Cognitive Behavioral Therapy, Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990), and recently

Dialectical Behavioral Therapy (Linehan et al., 2006) contain evidence of the influence of mindfulness on personality disorders. People with Borderline Personality Disorder (BPD) have trouble with emotion regulation (Linehan, Bohus, & Lynch, 2007) and are usually suicidal in their 20s and 30s (Neacsiu, Rizvi, & Linehan, 2010).

Although there is evidence of a moderate effect of early behavioral therapy on BPD patients (Hampton, 1997), the recent Dialectical Behavioral Therapy (DBT) uses mindfulness-based methods in combination with early behavioral therapy to teach patients with BPD the skills that are essential and effective in their treatments. A study by Neacsiu et al. (2010) resulted in three times more use of these skills by BPD patients who went through DBT compare to other therapy methods. In addition, the therapy time decreased and sustainability of the treatment increased in the Bohus et al. (2004) study.

The debate between psychology scholars over personality traits and their stability manifests itself in the model in this study explaining the directionality of the relationship of personality traits and the mindfulness trait. With awareness of the effects of psychotherapy in changing personality (McCrae, 1991), Thompson and Waltz (2007) believe that any direction of causal relationship between personality and the mindfulness trait is possible. They claim (p. 1876), “It is unclear if everyday mindfulness may shape personality or personality may shape everyday mindfulness or whether both are shaped by other factors.” Brown and Ryan (2003, p. 836) also do not rule out the possible effect of the mindfulness trait on personality traits – referring to the Sheldon et al. (1997) study: “Recent research has shown substantial variability across the time in several phenomena that clearly qualify as traits, including big five dispositions ... .”

In the conclusion of their study, Thompson and Waltz (2007) suggest a longitudinal study to explore such directionality. Either personality influences mindfulness or vice versa, it is important to explore this directionality in explaining important work-related outcomes such as customer orientation. The primary objectives of the present study are to examine (1) whether the relationship between mindfulness and customer orientation is mediated by the personality factors

conscientiousness and neuroticism, and 2) the effectiveness of a two-week mindfulness intervention on mindfulness and customer orientation of service employees.

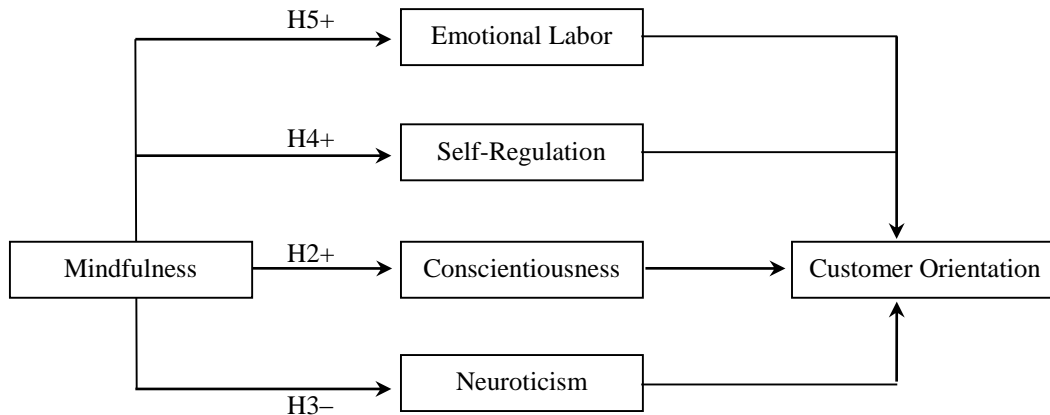
Considering the effect of mindfulness-based methods such as Dialectical Behavior Therapy on the treatment of personality disorders, I anticipate that mindfulness training might actually influence personality traits. As such, this is the first study of which I am aware that predicts mindfulness training will be associated with changes in the personality traits conscientiousness and neuroticism.

### **What Drives the Mediating Role of Conscientiousness and Neuroticism?**

It is important to understand the relationship between conscientiousness, customer orientation, and mindfulness because conscientiousness is related to several work-related outcomes (e.g., Hunter & Hunter, 1984; Mount & Barrick, 1995). In addition, literature shows a consistent positive relationship between mindfulness and conscientiousness (e.g., Thompson & Waltz, 2007, Brown & Ryan, 2002; Giluk, 2009). Thompson and Waltz (2007, p. 1883) imply a directionality in such an association of mindfulness and conscientiousness, saying, “As conscientiousness refers to a degree of organization and motivation in carrying out goals, it would seem that one needs to be mindful to be conscientious.”

Does mindfulness directly affect conscientiousness, or are there other mechanisms? I collected some cross-sectional pilot data and compared two competing models of the relationship between mindfulness and conscientiousness and neuroticism. The model in which conscientiousness and neuroticism was regressed onto mindfulness was a better fit to the data than the model in which mindfulness was regressed onto conscientiousness and neuroticism. Although it was only cross-sectional, the structural equation model supported the proposition that mindfulness might affect customer orientation through the mediating effect of conscientiousness and neuroticism. I adapted a self-regulatory view to explain this relationship. My theoretical model is presented in Figure 1.





**Figure 1: Hypothesized Model of Study**

### **Self-Regulation Theory, Personality, and Mindfulness**

Despite the widespread use of mindfulness in medical interventions and therapies, the benefits of mindfulness do not stop at therapeutic methods. Recent literature examining the relationship between mindfulness practices and employee resilience and performance shows that individual mindfulness causes better employee performance, physical and psychological health, self-regulation of emotions, and overall well-being (Glomb et al., 2011). Mindfulness is defined as the self-regulation of thoughts and emotions, openness to experiences, and awareness (Bishop et al., 2004). As such, self-regulation as one of the principal facets of mindfulness can be explored through “self-regulation theory.” More specifically, the self-regulation of thoughts, emotions, and behavior are factors that might help to explain the influence of mindfulness on customer orientation of service employees and the mediating effect of the personality factors conscientiousness and neuroticism.

Self-regulation is a distinct human trait that makes it possible for an individual to conform to the society’s normative behaviors (Baumeister et al., 2006). Today, human life is more associated with complex social interactions as a major consequence of human evolution (Baumeister, 2005). As such, much higher psychological capacity such as self-regulation has become essential (Vohs et al., 2008). Deficient self-control is linked to many problems in human life such as drug abuse, alcoholism,

crime, overindulging in food, violence, and unwanted pregnancy (Baumeister et al., 1994; Gottfred & Hirschi, 1990; Vohs & Faber, 2007).

The strength model of self-regulation implies that it is an energy/strength that is an attribute of personality and can be depleted (Baumeister et al., 2006). This strength can be restored through means that decrease the likelihood of ego-depletion (Baumeister et al., 2006). Not only this strength can be increased through means such as targeted trainings, individuals are different in self-regulation strength. Self-regulation differences can be measured by conscientiousness measures through measures of personality (Costa & McCrae, 1992; Gosling, Rentfrew, & Swann, 2003). To examine whether conscientiousness is a valid measure of self-regulation, this study also includes measures of self-control and emotional labor in the hypothesized model.

Baumeister et al. (2006) compare self-regulation to a muscle that, if regularly exercised, can gain strength. As such, one can anticipate that by paying attention and better managing thoughts and emotions through mindfulness intervention, individuals can increase their capacity to control their thoughts, emotions, and behaviors. Moreover, an individual can manage the depletion of his/her self-control by enhancing it through mindfulness training, leading to better management of her/his thoughts, emotions, and behaviors.

Many service employees work in very stressful environments with little or no room for error. Additionally, direct contact with customers might deplete employees' cognitive and emotional reserves to deal with stressful situations. Employee errors under stress can result in their inability to handle conflict, obtain reliable information, and connect with customers, which may cause customer dissatisfaction (Ndubisi, 2012). Organizations usually find it more costly to attract new customers than to keep existing customers (Reichheld & Sasser, 1990); therefore, it is of ultimate importance to them to avoid and efficiently manage factors that might lead to customer dissatisfaction.

Mindfulness can enhance and restore the service employee's self-regulation in dealing with conflict, stress, and ambiguity. Considering the operational definition of mindfulness as self-regulation of thoughts, emotions, and behavior (Bishop et al., 2004), and conscientiousness as a

measure of self-regulation, it is possible to claim that self-regulation of thoughts, emotions, and behavior are characteristics that a conscientious individual is more likely to possess and that a neurotic individual lacks.

As was explained earlier, a conscientious employee possess self-regulation and self-discipline and is in control of his/her behavior in dealing with stressful scenarios such as the service environment (Costa & McCrae, 1992, 1995; Kabat-Zinn, 1990). A neurotic individual, on the other hand, is impulsive, prone to anger, and aggressive (Costa & McCrae, 1992, 1995; Kabat-Zinn, 1990). Neuroticism in contrast with conscientiousness is a solid predictor of negative reactivity, a sign of lack of self-regulation (Wilkowski & Robinson, 2008). Mindfulness training can restore self-regulation strength, leading to higher conscientiousness and less neurotic tendencies caused by depleted cognitive/emotional energy. With enhanced conscientiousness through the increase in self-regulation, one can expect improvement in job-related factors such as customer orientation.

To explain further the mechanism of restoring depleted self-regulation energy, this study uses the example of distinguishing between primary and secondary emotions. Both primary and secondary emotions might surface in interpersonal interactions between a service employee and customers (Fruzzetti & Iverson, 2004). For instance, in a conversation between an employee and customer, the employee might feel anger in response to a demanding customer. But there might be a chance that surfaced anger is just a secondary emotion to the primary emotion of anxiety about fulfilling the customer's need against organizational policy, which might put his/her job in jeopardy (Fruzzetti & Iverson, 2004).

As an individual learns how to inhibit this “secondary elaborative processing of thoughts” (Bishop et al., 2004, p. 233), such as anger in our example, through mindfulness training, more cognitive/attention capacity is released as an available resource in facing the situation. This will provide the individual with a broader range of information about her/himself, the customer, and the situation, which might have otherwise been missed. Conscientious individuals are better able to regulate emotions and thoughts. As such, I anticipate that the resources that have become available

(e.g., the attention or cognitive capacity) through mindfulness practice will help in dealing with rising emotions. However, a neurotic employee who reacts to the stimuli based on emotions and without the ability to recognize the distinction between primary and secondary emotions will have trouble regulating emotions and behavior.

Another example is an employee's capacity to handle the conflict, stress, and ambiguity as prevailing attributes of the service sector. Mindfulness frees up the cognitive and emotional capacity to deal with complex stressful conditions, providing more resources for self-regulation. Individuals with higher conscientiousness seem to have more cognitive and emotional resources to deal with such situations. In contrast, a neurotic employee is anxious, angry, and irritable, causing faster burn out of his/her resources in dealing with complex and stressful situations.

In a study of 70 primary care physicians in Rochester, New York, Krasner et al. (2009, p. 1284) demonstrated that an educational program in mindfulness improved the "physicians' well-being, psychological distress, burnout, and capacity for relating to patients." According to Krasner et al. (2009, p. 1284), 60% of primary care physicians deal with the symptoms of burnout such as "emotional exhaustion, depersonalization (treating patients as objects), and a low sense of accomplishment." Consequently, these symptoms lead to errors, customer dissatisfaction, and legal actions. The authors show that an eight-week mindfulness-based training program could improve primary care physician attitudes and emotions in both the short and the long term.

## **Hypotheses**

In summary, a higher conscientiousness is associated with higher self-discipline, self-regulation, and being less reactive. Mindfulness training might increase a person's awareness of his/her current thoughts, emotions, state of mind, behavior, and environment and provide enough resources to regulate emotions, thoughts, and behaviors in relation to customers, potentially increasing customer orientation. In more simple terms, mindfulness training can change the way employees interact with customers by influencing their conscientiousness and neuroticism. Thus, I anticipate that mindfulness

training through self-regulation of thought and emotion may increase conscientiousness and decrease neuroticism.

In the present study, I propose that both enhanced mindfulness through targeted training and naturally occurring mindfulness trait variability influences two basic personality factors, neuroticism and conscientiousness, which in turn predict variability in customer orientation.

H1: Mindfulness will be stronger after a two-week mindfulness program compared to the control group.

H2: The relationship between mindfulness and customer orientation is partially mediated by conscientiousness.

H3: The relationship between mindfulness and customer orientation is partially mediated by neuroticism.

H4: The relationship between mindfulness and customer orientation is partially mediated by self-regulation.

H5: The relationship between mindfulness and customer orientation is partially mediated by emotional labor.

## CHAPTER III

### METHODOLOGY

In my attempt to test my model, I designed two studies.

- Study 1 – a cross-sectional study measuring the hypothesized variables.
- Study 2 – a longitudinal study containing a mindfulness training program.

#### **Study 1 – Theory Testing**

Study 1 is a cross-sectional study that tests the proposed model by examining the model fit of the relationships of mindfulness, conscientiousness, neuroticism, and customer orientation. It is designed to test the theory of this study by administering a survey on the employees who work directly with customers/clients.

#### *Participants and Procedure*

Study 1 consists of a cross-sectional self-report study conducted on a sample of 309 individuals recruited through the Amazon's Mturk platform. Crowd-sourcing environments such as Mturk provide a more demographically diverse, less biased sample compared to student samples (Buhrmester, Kwang, & Gosling, 2011). Additionally, Mturk sample data are as reliable as other methods (Buhrmester et al., 2011).

Of the 309 participants of this study, 52% were male, 37% had a four-year college degree, 43% had two-year degrees or some college, 8% had master's degrees, 2% had doctoral or other professional degrees (e.g., JD), and 10% had high school diplomas/GEDs. Twenty-seven percent

were manager of one or more subordinates, 16% were academically trained professional or equivalent (not managing people). Fourteen percent were vocationally trained craftspersons, technicians, IT specialists, nurses, artists or equivalent; 26% were generally trained office workers or secretaries, 15% were unskilled or semi-skilled manual workers; and 2% were managers of one or more managers. The average age was 37.37 (SD = 10.93).

The survey was completed on Qualtrics, a survey generation and distribution platform. The survey contained the consent form, demographic questions, and study measures and was distributed through Amazon's Mechanical Turk to the workers. Recruiting criteria were at least 18 years of age, working in an office setting (not home), working directly with customers/clients, and living in Canada or the U.S. Twelve participants reported that they did not have direct contact with customers, so their responses were eliminated from the analyses.

### *Measures*

*Mindfulness:* Mindfulness was measured using the Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003), a 15-item scale that is scored using a six-point Likert scale (1: almost always to 6: almost never). Example items are: "I found it difficult to stay focused on what is happening in the present," "I rush through activities without being really attentive to them." Internal consistency (coefficient alpha) for scores on the MAAS was  $\alpha = 0.93$ .

*Conscientiousness:* Conscientiousness was measured using 20 items from the International Personality Item Pool (IPIP) (Goldberg et al., 2006). Ten items out of 20 were positively keyed, and 10 others were negatively keyed. The scale is a self-report measure using a five-point Likert-type scale (1: Very Inaccurate to 5: Very Accurate). Conscientiousness was scored taking the mean of the ratings of the 20 items. Example items are: "Am excited in my work," and "Shirk my duties." Internal consistency for scores on conscientiousness was  $\alpha = 0.95$ .

*Neuroticism:* Neuroticism was measured using 20 items from the IPIP (Goldberg et al., 2006). Ten items out of 20 were positively keyed, and 10 others were negatively keyed. The scale is a self-

report measure that used a five-point Likert-type scale (1: Very Inaccurate to 5: Very Accurate). Neuroticism was scored taking the mean of the ratings of the 20 items. Example items are: “Panic easily” and “Remain calm under pressure.” Internal consistency for scores on neuroticism was  $\alpha = 0.96$ .

*Emotional Labor:* The Brotheridge and Lee (2003) Emotional Labor Scale (ELS) was used for this study. This self-report scale contains 15 items, including one descriptive item that asked employees to enter the amount of time they spend with a customer. The scale is scored by using a five-point Likert scale (1: never to 5: Always). Emotional labor was scored taking the mean of the ratings of the items. Example items are: “I resist expressing my true feelings” and “I hide my true feelings about a situation.” Internal consistency for the scores on ELS was  $\alpha = 0.83$ .

*Self-Regulation:* Self-regulation was measured using the Tangney, Baumeister, and Boone (2004) self-report questionnaire. I used the 13-item short version because it shares the same psychometric properties as the long version. Tangney et al. (2004) obtained short version reliabilities of 0.83 and 0.85 (0.89 for the long version). Thus, I used the short version of the scale with 13 items to avoid a very lengthy survey. The scale is a self-report measure that used a five-point Likert-type scale (1: Never to 5: All of the time). Self-regulation was scored taking the mean of the ratings of the 13 items. Example items are: “I do certain things that are bad for me if they are fun,” and “I wish I had more self-discipline.” Internal consistency for scores on self-control was  $\alpha = 0.91$ .

*Customer Orientation:* Customer orientation was measured using a survey developed by Brown et al. (2002). The measure contains two dimensions of customer orientation – needs (propensity to fulfill a customer’s need) and enjoyment (magnitude of feeling of enjoyment in helping customers). I used a seven-point Likert-type scale (1: Strongly Disagree to 7: Strongly Agree). Customer orientation was scored taking the mean of the ratings of the items across both dimensions. Example items are: “I find it easy to smile at each of my customers,” and “I try to help customers to achieve their goals.” Internal consistency for scores on customer orientation was  $\alpha = 0.95$ .



## **Study 2 –Mindfulness Intervention**





















The present study examines the effect of a two-week mindfulness training program on participants with service experience. The program runs for two full weeks with short daily practices consisting of three to five minutes daily meditations and three to five minutes of daily reading materials. The mindfulness training program is designed based on the MBSR (Kabat-Zinn, 1982) and MBCT (Segal et al., 2004) programs. Because the training program originally was designed to be offered online, and because the online version was not available at the time of intervention, for the purpose of the present study the training material was modified to sufficiently instruct participants, provide them direction, and create a communication medium. Measures were the same as in Study 1 with mindfulness as the independent variable and customer orientation as the dependent variable and with the four mediators conscientiousness, neuroticism, self-control, and emotional labor.

### *Two-Week Mindfulness Training Program*

Study 2 consisted of a two-week (14-day) mindfulness training program composed of a daily guided meditation (three to five minutes, twice daily), email communications (once a day), and readings (three to five minutes per day). The original website was supposed to provide information pages, reminder emails, and a medium for communication. I made up for these elements with emails containing instructions, reminder emails, evening Skype meetings, texts, and occasional communication as necessary. I asked participants to text me “done” upon completion of their daily practice (only once a day). I also created a table to make it easier for participants to stay on track (Figure 2).

This study’s mindfulness training was shorter in duration than other mindfulness programs such as MBSR (Kabat-Zinn, 1982) and MBCT (Segal et al., 2002), which were originally developed as clinical interventions to treat patients with a range of health issues. Although these two are empirically tested programs, they are long and need regular group training with a mindfulness teacher, which might not be an affordable training program for many organizations. To promote the

practice of mindfulness, I developed a shorter self-training program with regular guided meditations and readings that is sufficient to train mindfulness in the normal population.

Days of week	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15
Dates	Saturday Aug 15	Sunday Aug 16	Monday Aug 17	Tuesday Aug 18	Wednesday Aug 19	Thursday Aug 20	Friday Aug 21	Saturday Aug 22	Sunday Aug 23
Evening	Day 7 Reading then meditation 	Day 8 Reading then meditation 	Day 9 Reading then meditation 	Day 10 Reading then meditation 	Day 11 Reading then meditation 	Day 12 Reading then meditation 	Day 13 Reading then meditation 	Day 14 Reading then meditation 	
Afternoon									
Morning	Day 6 meditation repetition 	Day 7 meditation repetition 	Day 8 meditation repetition 	Day 9 meditation repetition 	Day 10 meditation repetition 	Day 11 meditation repetition 	Day 12 meditation repetition 	Day 13 meditation repetition 	Day 14 meditation repetition 
 This sign means the questionnaire need to be filled out									

**Figure 2. A Sample of Mindfulness Training Schedule -Week 2.**  
This schedule is also representative of the schedule of the first week.

The present study’s mindfulness program contains elements similar to MBSR and MBCT, but packaged in a 14-day self-training modules that employees can easily follow on their own in about 15 minutes per day. If employees practice early in the morning and later in the evening, it would not even take away from employee’s time at work. If done at the workplace, it can be done in the first few minutes of a meeting or any other event at work in a group setting for duration of few minutes. Employees can also do it at any time throughout the day on their own time. A list of the mindfulness training elements follows.

1. Daily Reading Materials. Reading materials contained a brief explanation of the daily guided meditation and typical questions and answers.
2. Thirteen Guided Meditation Audios. Participants had the choice of a male or a female voice. These meditation audio files guided meditators through their meditation practice to the end. The audios lasted between three to six minutes.

3. Daily Emails Containing Practice Materials. Participants received daily emails that provided a brief explanation of the concept of that specific day's practice and required attachments (audio of guided meditation and reading).
4. Daily Reminder Emails, usually containing the same concept that participants were supposed to practice, elaborated in a different way. The purpose was to remind participants to practice.
5. Once a Day "Done" Texts sent by participants after completing the daily practice. I followed up with participants if the "done" texts were not sent by evening.
6. I was available online every night through Skype for occasional Q and A sessions. Regardless of whether participants appeared on Skype, I stayed online for one hour from 9 to 10 PM.
7. Three Similar Surveys: at the beginning (Day 1), after one-week (Day 7), and the end (Day 14).

For the evening practice, participants were instructed to read the reading first and do the meditations second. They were also instructed that if they stayed behind for one or two days, to continue doing the training sequentially and not to jump to the next day's material. In addition, they were asked not to repeat the material on same day. Two participants missed one or two days of practice. They were allowed to catch up with the practice sequentially.

Although consent forms were provided on Day 1 along with material, I arranged a Skype session the night before Day 1 to explain training and the participants' rights. Participants were informed that I would use their data for research purposes. I asked them to carefully read the consent forms at the beginning of the baseline survey. The consent sheet provided on the first page of each survey described the purpose of the research, the researcher, research benefits, possible risks, and contacts.

The first set of material was sent on the evening of August 9, 2015. The evening practice contained a reading and a guided meditation. Participants were required to repeat the guided meditation only on the morning after the evening practice. A guided meditation is a one in which a voice instructor talks the meditator through the process of meditation. He/she instructs participants to intentionally pay attention to their present-moment experience. The instructions for meditation were

provided in the readings as well as in the guided meditation. A brief explanation of the practice is provided below. Participants were instructed to:

1. sit in a comfortable position, preferably in silence;
2. close their eyes;
3. put their hands on their thighs or any comfortable position;
4. take few deep breaths;
5. start breathing naturally;
6. locate their anchor point, which is usually normal breathing and or one specific physical location related to breathing such as nostrils;
7. observe their thoughts, emotions, or bodily sensations;
8. gently return to their anchor point after their observation of and attention to stimuli. Coming back to anchor point was described as coming back *home* after a day of being away;
9. repeat steps 6 and 7 for the length of meditation.

The concept of *anchor point* was extensively explained in the readings and guided meditations. In summary, an *anchor point* is a point in the body or an element that the meditator returns to it after observing and paying attention to a specific stimulus. This method will help the meditator to separate those stimuli (e.g., thoughts, bodily sensations, or emotions) from self (Glomb et al., 2011). Each daily training emphasized specific concepts. An outline of the guided meditations and readings are provided in the Table 1. Although the concepts of the outline in Table 1 are similar to the other popular mindfulness programs such as MBSR (Kabat-Zinn, 1982), the structure, type of elements of training, frequency, means, and length are different.

**Table 1. Mindfulness Training: Daily Guided Meditations and Readings Outlines**

Day	Reading Topics	Meditation Module
1	Introduction to course; Benefits of mindfulness; Definition of mindfulness	Mindful eating
2	Common misconceptions about mindfulness, Meditation posture; Body scanning	Body scanning
3	A deeper understanding of mindfulness; The anchor point; Mindfulness of breathing	Mindfulness of breathing
4	Naming and noting the breath	Naming and noting the breath
5	Counting the breath	Counting the breath
6	Mindfulness of sounds	Mindfulness of sounds
7	The challenge of restlessness	Working with restlessness
8	The challenge of sleepiness; Mindfulness of the body	Mindfulness of the body
9	Resolving blocks	Mindfulness combination practice
10	Mindfulness of feelings	Mindfulness of feelings
11	Dealing with common issues	Mindfulness combination practice
12	Mindfulness of thoughts	Mindfulness of thoughts
13	Course Review	Mindfulness combination practice
14	Starting a regular meditation practice; Everyday “spontaneous” mindfulness	Everyday mindfulness (no Audio)

For instance, on Day 2, participants first read reading material containing explanations of typical misconceptions about mindfulness meditation (e.g., stopping one's thoughts) and the meditation posture and purpose of body scanning. Next, participants practiced body scanning during their guided meditation. Body scanning is a standard practice of mindfulness that can be found in the outlines of many other mindfulness programs such as MBSR (Kabat-Zinn, 1982) and the Hülshager et al. (2013) training program. Through body scanning practice, participants learned how to be intentional observers of their bodily sensations.

Participants read the material and practiced body scanning in their meditation in the evening of the second day; on the morning of Day 3, they repeated only the body scanning guided meditation. The training design allowed participants to do 10 to 12 minutes of readings and guided meditations at night, when they had more time. Participants only repeated the three- to five-minute guided meditation the next morning, when they were usually rushed (Figure 2).

The biggest challenge in such a research design is to find ways to motivate and control participants to stay on track and complete the full two-week training program. To achieve this goal, I created a virtual training/research space using Skype, text, and email. I also announced that I was present every moment of the day to answer questions. Although it can be tempting to explain and teach, I refrained from providing too much explanation and relied on the training materials provided so that the training was standardized. Additionally, I participated in the training with the group. The treatment participants were asked to send a text upon finishing their daily practice. That helped me to keep track of their practice. Day 14 practice was different from other days in that participants were instructed how to apply mindfulness practice in a real life situation (e.g., eating, communicating with clients, and parenting). Thus, there was no guided meditation on Day 14 but there was a reading.

Fourteen participants regularly continued with the daily practice for two weeks. No specific time during the day was enforced; however, I realized that the majority of participants do their morning meditation early in the morning and the next meditation and reading at night. In the few cases in

which participants needed to catch up to the daily practice, they did the missed practice during the day. Participants filled out the study measures on Days 1, 7, and 14.

### *Participants and Procedure*

Participants in the treatment group of Study 2 were recruited through a seminar and networking. Recruiting criteria were requirements that participants be at least 18 years of age, located in U.S. or Canada, and working directly with clients at work.

The training started with 21 participants in the treatment group; however, only 14 completed the training. Eighty-six percent of the participants were female. All participants were from the Greater Toronto Area. Fifty percent had master's degree; 35%, a 4-year college degree; 8% doctoral; and 8% two-year college degree. None of the participants had any previous mindfulness training even though most had heard about mindfulness. Fourteen people completed the treatment, which yielded a response rate of 66.7 %. The response rate was better than the reported response rate of 52.3% in a recent meta-analysis on response rates in organizational survey research (Anseel et al., 2010). It was also better than response rate of the intervention done by Hülshager et al. (2013) (49.8%). The mean age of the 14 participants who completed the training was  $M = 42.4$  ( $SD = 8.3$ ).

The control group recruiting criteria was the same as that for the treatment group. Because of the small sample size, I was not able to randomly assign people to the control and treatment groups. I matched the control group to the treatment group so they were as similar as possible. There were 15 participants in the control group. Twelve participants in the control group were recruited online through Elance. Three of the control group participants were recruited through my social network. Elance is a crowd-sourcing group similar to Amazon's Mturk. Compared to other crowd-sourcing sites, the recruiters on Elance have more information and tools to select the right people for their assignments. Because there is access to the resumes and work histories, the process of hiring Elancers is similar to hiring workers in an office setting. Due to the small sample, I had the chance to regularly communicate with the control group participants through Elance.

Thirty-nine percent of the control group participants were male. Their average age was 32 (SD = 7.8). Fifty-six percent had four-year college degrees, 17% some college, 11% two-year college degrees, 12% doctoral and other professional degrees (JD and MD), and 6% master's degrees. The control group was asked to complete the survey on Days 1, 7, and 14. None of the control group participants had previous mindfulness training. Participants were not aware of the exact aim of the study other than investigating a program to improve mindfulness. The full study lasted 14 days. During these 14 days, the treatment group completed the intervention, and the control group only filled out the surveys on the same day as the treatment group.

### *Measures*

Measures in Study 2 were the same as in Study 1.



## CHAPTER IV

### FINDINGS

#### Study 1 Results

The Study 1 design is a self-report cross-sectional survey. After the survey, I reviewed the data to ensure that the respondents had been engaged and to recognize outliers. There were no missing data because the answers were forced. Descriptive statistics are presented in Table 2.

The correlation results for emotional labor did not support my theory; emotional labor was positively correlated with both conscientiousness and neuroticism. In addition, emotional labor correlations with conscientiousness, neuroticism, and self-control were very small and not statistically significant (Table 2).

**Table 2. Means, Standard Deviations, and Correlations Using Composite Variables**

Variable	M	SD	1	2	3	4	5	6
<i>Mturk Sample</i>								
1. Mindfulness	4.38	0.90	<b>0.93</b>					
2. Conscientiousness	4.02	0.70	0.55*	<b>0.95</b>				
3. Neuroticism	2.27	0.90	-0.60*	-0.57*	<b>0.96</b>			
4. Emotional Labor	3.10	0.54	-0.12*	0.05	0.05	<b>0.83</b>		
5. Self-Control	3.56	0.70	0.58*	0.63*	-0.62*	-0.01	<b>0.91</b>	
6. Customer Orientation	5.65	0.98	0.39*	0.53*	-0.44*	0.23*	0.46*	<b>0.95</b>

Note: \* $p < 0.05$ .  $N = 309$ . Values in boldface represent the coefficient alpha estimates.

I computed item parcels to reduce the indicator-to-sample size ratio. Item parcels keep the requirements for sample size manageable, are more reliable, and are more normally distributed than single items. However, they still provide multiple indicators per latent construct, which is

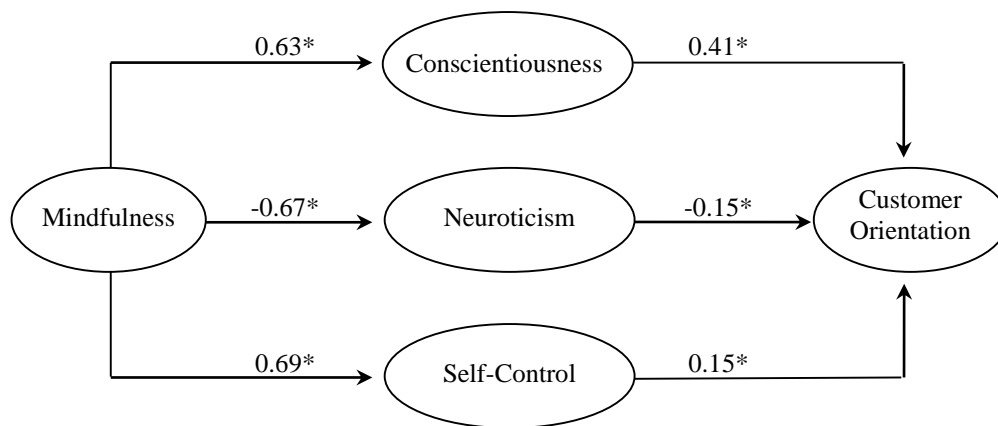
not the case if full-scale scores are used (Bagozzi & Edwards, 1998). There are several methods for creating multi-item composites (e.g., Mossholder, Settoon, Harris, & Armenakis, 1995; Cramer, 1996; Williams & Anderson, 1994). With the exception of customer orientation, I created empirically equivalent indicators (Bagozzi & Edwards, 1998). For MAAS – conscientiousness, neuroticism, emotional labor, and self-control – I parceled items based on item reliability and variance to create three parcels for each measurement with similar reliability and variance. For customer orientation, I used theory to create two parcels (Landis, Beal, & Tesluk, 2000). Because *need* and *enjoyment* were dimensions of the construct (Brown et al., 2002), they also became two parcels of customer orientation.

The measurement model for the parceled sample was a good fit to the data:  $\chi^2(104) = 194.66$ ,  $p < .05$ , Root Mean Square Error of Approximation (RMSEA) = 0.05, Standardized Root Mean Square Residual (SRMR) = 0.03 and Comparative Fit Index (CFI) = 0.98. I also checked item reliabilities and discriminate and convergent validity of the indicators. Convergent validity among factors was acceptable except emotional labor, which correlated only with customer orientation ( $r = 0.21$ ) but was not related to mindfulness ( $r = 0.03$ ), conscientiousness ( $r = 0.08$ ), neuroticism ( $r = -0.07$ ), or self-control ( $r = 0.07$ ). Correlation results revealed questionable convergent validity of the emotional labor measure. As such, I removed emotional labor from the model.

After confirming the fit of the measurement model, I ran structural equation modeling on the hypothesized model in Figure 1 using JMP PRO 11. The results of the analysis was a moderate fit:  $\chi^2(71) = 252.6$ ,  $p < 0.05$  RMSEA = 0.09, CFI = 0.96. The standardized effects are provided in Figure 3. Based on the structural model, 35% of the variance in customer orientation was explained by parameters in the model ( $R^2 = 0.35$ ).

To assess mediation, I tested the model with conscientiousness, neuroticism, and self-regulation as multiple mediators for the relationship of mindfulness (IV) and customer orientation (DV) using the Preacher and Hayes (2008) standard procedures. The analysis allowed me to determine whether all three mediators were statistically significant as hypothesized, or whether one or two variables

explain more of the variance. Preacher and Hayes (2008) introduced a method to formally test the significance of the mediation effects. Their macro for SPSS called “Process” ([www.Guilford.com/p/hayes3](http://www.Guilford.com/p/hayes3)) was used to determine the significance of each mediators. The Preacher and Hayes (2004, 2008, & 2014) method consists of a multiple regression analysis that uses a bootstrapping method to obtain the point estimates of the indirect effects and bias corrected confidence intervals. In this analysis, the 95 % confidence interval of the indirect effects was obtained with 5,000 bootstrap resamples. I used the composite variables for the mediation test.



**Figure 3: Standardized Parameter Estimates in the Hypothesized Structural Model**

Although the direct effect of mindfulness on customer orientation was positive and statistically significant ( $B = 0.42$ ,  $t(307) = 7.31$ ,  $p < .001$ ), adding mediators to the model changed that effect. By adding three mediators (conscientiousness, neuroticism, and self-control) to the model, the direct effect of mindfulness on customer orientation substantially decreased and was not statistically significant ( $B = 0.04$ ,  $t(304) = 0.56$ ,  $p = 0.58$ ).

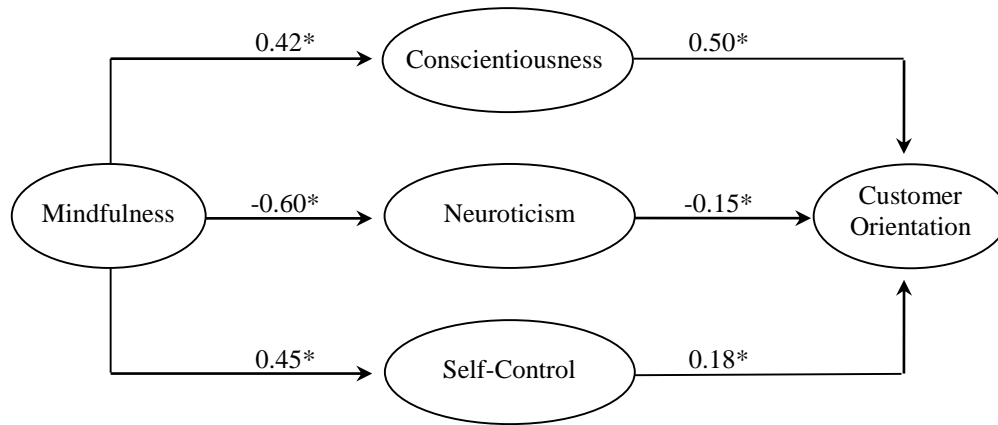
The direct relationships between mindfulness and conscientiousness, neuroticism, and self-control were all statistically significant (Table 3 and Figure 4). Although the relationship of conscientiousness and neuroticism with customer orientation was statistically significant, self-control was not related to customer orientation (Figure 4). Bootstrapping results showed a positive significant

indirect effect of conscientiousness in the relationship of mindfulness and customer orientation (B = 0.21; 95% CI = 0.08 to 0.36).

**Table 3. Direct and Indirect Effects of Mindfulness, Conscientiousness, Neuroticism, and Self-Control on Customer Orientation**

Paths	Effect Point Estimate	95% CI	
		Lower	Upper
<i>Indirect Effects (Mediation)</i>			
MAAS → C → CO	0.21*	0.08	0.36
MAAS → N → CO	0.09	-0.00	0.22
MAAS → SC → CO	0.08	-0.03	0.19
<i>Direct Effects</i>			
MAAS → C	0.42*	0.35	0.50
MAAS → N	-0.60*	-0.69	-0.51
MAAS → SC	0.45*	0.38	0.52
C → CO	0.50*	0.32	0.68
N → CO	-0.15*	-0.29	-0.01
SC → CO	0.18	-0.01	0.37
MAAS → CO	0.04	-0.10	0.17

Note: Mturk Sample N = 309. MAAS (Mindfulness Attention Awareness Scale), C (conscientiousness), CO (customer orientation), SC (self-control), and N (neuroticism). \* $p < 0.05$

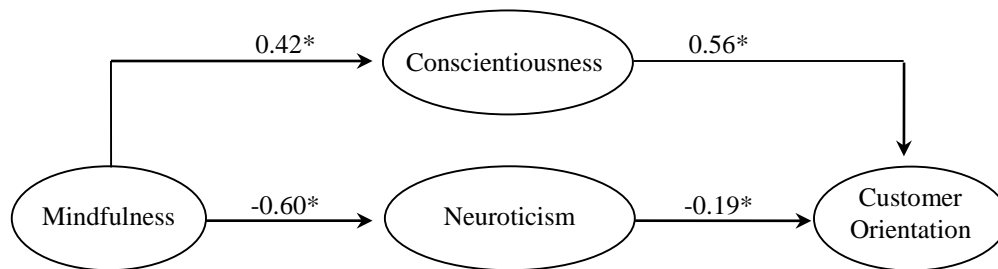


**Figure 4. The Full Mediation Model of Conscientiousness, Neuroticism, and Self-Control on the Relationship of Mindfulness and Customer Orientation**

Self-control is correlated with both conscientiousness ( $r = 0.63$ ) and neuroticism ( $r = -0.62$ ). Conscientiousness was a statistically significant mediator in the hypothesized model. There was no indirect effect for self-control, but there was an insignificant indirect effect for neuroticism.

Therefore, I also ran the mediation test without self-control in the model. In a two-mediator model with conscientiousness and neuroticism as mediators, both mediation paths between mindfulness and customer orientation were statistically significant (Figure 5).

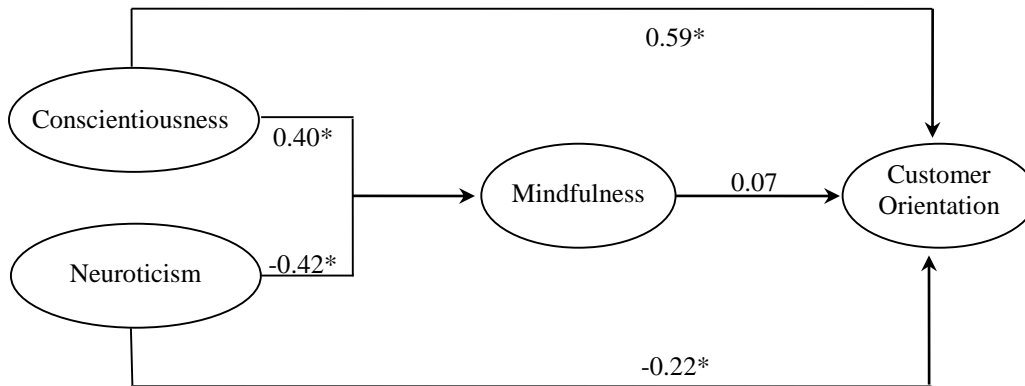
Bootstrapping results showed a positive significant indirect effect of conscientiousness ( $B = 0.24$ ; 95% CI = 0.25 to 0.47) and neuroticism ( $B = 0.11$ ; 95% CI = 0.01 to 0.22). As such, the formal mediation significance test (Preacher & Hayes, 2008; Hayes & Preacher, 2014) supported the full mediation of conscientiousness and neuroticism on the relationship between mindfulness and customer orientation (Figure 5). Similar to my pilot study, the strongest mediators were conscientiousness ( $B = 0.24$ ) and then neuroticism ( $B = 0.11$ ).



**Figure 5. The Full Mediation Model of Conscientiousness and Neuroticism on the Relationship of Mindfulness and Customer Orientation**

One might argue that the alternative model with personality factors as independent variables might fit the data as equally well as the hypothesized model. I switched the mindfulness and personality factors in the model to create the alternative model displayed in Figure 6, implying that mindfulness mediated the relationship of both personality factors and customer orientation. The results showed that the alternative model did not fit the data well, compared to the hypothesized model. Results demonstrated that both personality factors conscientiousness ( $B = 0.40$ ,  $t(306) = 5.86$ ,  $p < 0.05$ ) and neuroticism ( $B = -0.41$ ,  $t(306) = -7.97$ ,  $p < 0.05$ ) were related to mindfulness. In addition, conscientiousness ( $B = 0.59$ ,  $t(306) = 7.23$ ,  $p < 0.05$ ) and neuroticism ( $B = -0.22$ ,  $t$

(306) = -3.53,  $p < 0.05$ ) were related to customer orientation. However, there was no statistically significant relation between mindfulness and customer orientation ( $B = 0.07$ ,  $t(305) = 1.01$ ,  $p > 0.05$ ).



**Figure 6. An Alternative Model Showing Mindfulness as Mediator of the Relationship of Conscientiousness and Neuroticism and Customer Orientation**

Indirect paths between conscientiousness ( $B = 0.03$ ; 95% CI = -0.03 to 0.09) and neuroticism ( $B = -0.03$ ; 95% CI = -0.09 to 0.03) and customer orientation were not statistically significant; as such, there was no mediation of mindfulness in the relationship of personality factors and customer orientation (Figure 6).

Study 1 results supported Hypotheses 2 and 3 but failed to support Hypotheses 4 and 5. Although Study 1 showed that higher mindfulness is associated with higher customer orientation and that this relationship is mediated by conscientiousness and neuroticism, it is not possible to establish causation with the use of correlation design. To improve causal inferences, I designed an intervention that ran for two weeks on a group of service workers.

## Study 2 Results

Study 2 was a longitudinal repeated measures design with a control group. Measurements were taken on each variable over three distinct periods – Days 1, 7, and 14 – over two weeks in both the treatment and control groups. Three measurement occasions allowed me to measure change in variables over time.

I conducted a Mixed Analysis of Variance (ANOVA) analysis to assess the effects of the between-subjects (mindfulness training and control) and within-subjects (time) variables on mindfulness. I coded the values for the mindfulness conditions 0 for control and 1 for the treatment group. In addition, each construct was measured at three points in time (Days 1, 7, and 14) in two groups (for six total conditions). Measuring variables at three time points gave me the chance to observe the change trajectory and compare change in the intervention and the control groups for every single construct. The means and standard deviations for control and treatment groups and their correlations are summarized in the Table 4.

It is evident from Table 4 that emotional labor correlations did not fit the theory; emotional labor correlated positively and sometimes negatively with mindfulness and conscientiousness. There was no recognizable pattern, and this replicated the results observed in Study 1 in that measurement of emotional labor did not fit well in the model.

The Mixed ANOVA was conducted using SPSS 23. Mauchly's (1940) test of sphericity for the repeated measure was conducted to determine whether the main effects violated the sphericity assumptions. A sphericity test is the test of homogeneity of the variance of the difference between samples. If this test fails, SPSS corrects the degrees of freedom and F-values.

*Mindfulness:* Results of the test of within-subject effects showed a statistically significant main effect of time on mindfulness:  $F(2, 54) = 17.54, p < .05$ . The time effect showed mindfulness increased significantly from Day 1 to Days 7 and 14. The main effect of the each condition (0 and 1) was investigated through the tests of between-subjects effects; it was not statistically significant:  $F(1, 27) = 0.76, p > .05$ .

Before looking at the interaction between condition and time, I investigated the homogeneity test between different time points of both groups. Since the Mauchly test of sphericity failed, I checked the Levene (1960) test of homogeneity to learn more. The Levene test of homogeneity is less sensitive to departures from normality. The Levene test for homogeneity for variance (for each measurement in time for the mindfulness) showed that although both groups fulfilled the

**Table 4. Means, Standard Deviations, and Correlations**

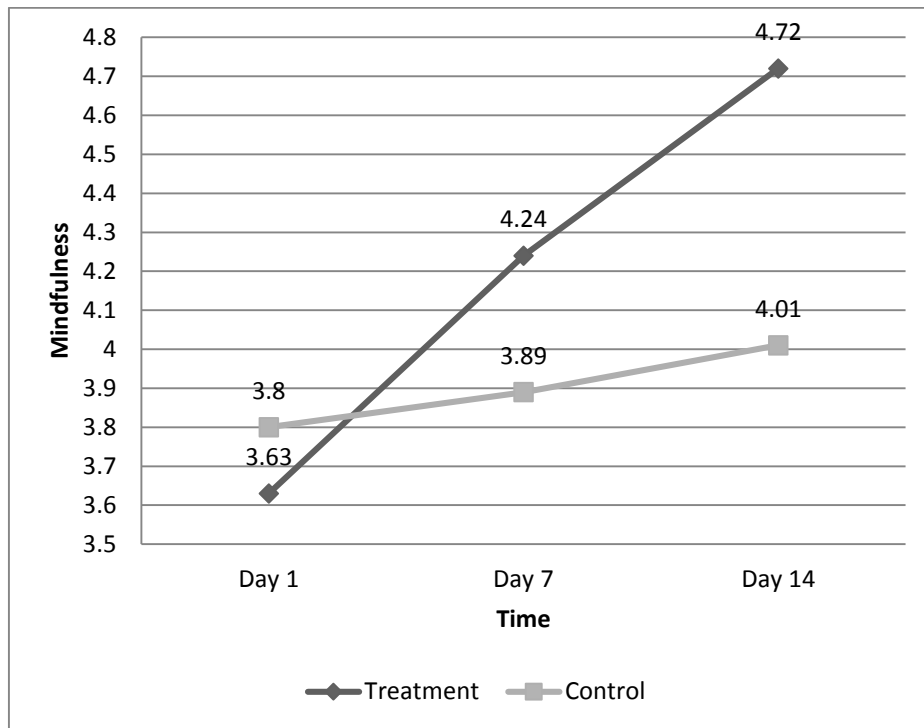
Variable	Treatment		Control		Cohen's d	1	2	3	4	5	6
	M	SD	M	SD							
<i>Day 1 Treatment &amp; Control</i>											
1. Mindfulness	3.63	0.88	3.8	1.19	0.20	0.93					
2. Conscientiousness	3.69	0.47	3.94	0.68	0.40	0.47*	0.88				
3. Neuroticism	2.83	0.51	2.63	0.65	-0.30	-0.69*	-0.50*	0.85			
4. Emotional Labor	3.10	0.39	3.18	0.72	0.20	-0.10	0.26	0.18	0.84		
5. Self-Control	3.52	0.53	3.51	0.59	0.01	0.58*	0.59*	-0.47*	0.03	0.82	
6. Customer Orientation	5.75	1.06	6.04	1.06	0.30	0.52*	0.72*	-0.41*	0.29	0.57*	0.95
<i>Day 7 Treatment &amp; Control</i>											
1. Mindfulness	4.24	0.74	3.89	1.12	-0.40	0.93					
2. Conscientiousness	3.79	0.64	3.94	0.68	0.20	0.38*	0.93				
3. Neuroticism	2.64	0.50	2.63	0.65	0.01	-0.57*	-0.49*	0.85			
4. Emotional Labor	3.39	0.68	3.28	0.64	-0.20	0.19	0.05	0.36	0.89		
5. Self-Control	3.67	0.48	3.60	0.57	-0.10	0.66*	0.60*	-0.51*	0.14	0.85	
6. Customer Orientation	6.28	0.71	6.04	1.06	-0.30	0.58*	0.53*	-0.46*	0.23	0.56*	0.95
<i>Day 14 Treatment &amp; Control</i>											
1. Mindfulness	4.72	0.69	4.01	1.13	-0.80	0.94					
2. Conscientiousness	4.14	0.54	3.92	0.82	-0.30	0.64*	0.95				
3. Neuroticism	2.24	0.73	2.44	0.69	0.30	-0.78*	-0.76*	0.92			
4. Emotional Labor	3.02	0.66	3.29	0.48	0.50	-0.25	-0.05	0.33	0.83		
5. Self-Control	3.97	0.62	3.62	0.67	-0.60	0.73*	0.81*	-0.77*	-0.30	0.90	
6. Customer Orientation	6.44	0.58	5.68	1.32	-0.80	0.45*	0.68*	-0.42*	-0.05	0.51*	0.95

Note: \* $p < 0.05$ . N = 14 for the treatment and N = 15 for the control group. Correlations are combined treatment and control groups.



homogeneity test requirements on Day 1, their variances become significantly different at Day 7 and 14. It is an expected finding given that the treatment group is responding to the mindfulness training.

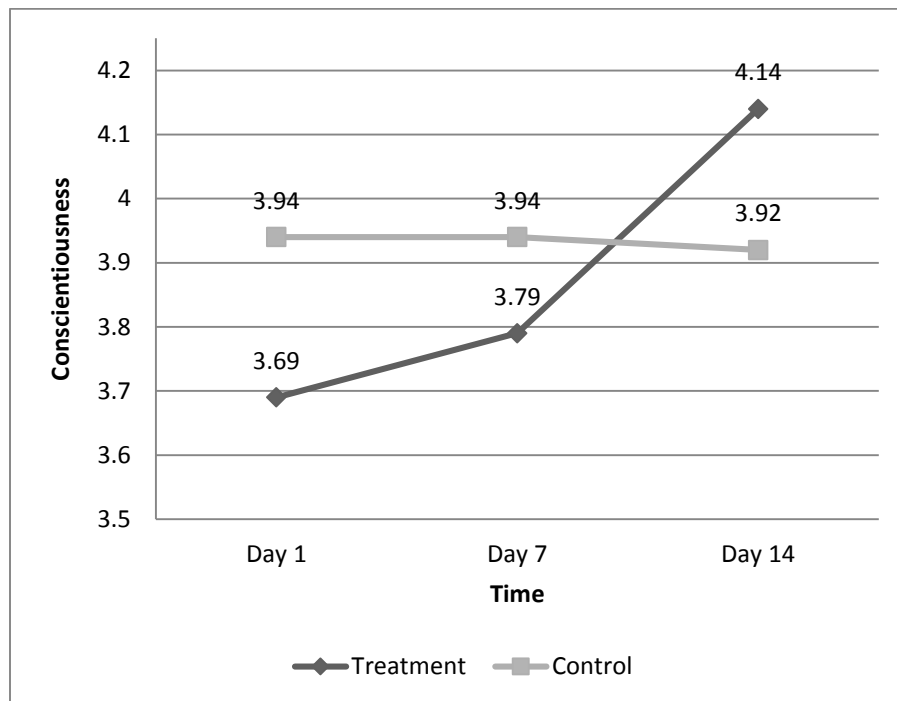
The interactive effect of the condition  $\times$  time on mindfulness was statistically significant:  $F(2, 54) = 7.9, p < 0.05$ . Mindfulness increased significantly in response to the training across three measurement occasions. As seen in Figure 7, over time, the gap between control and treatment became larger.



**Figure 7. Estimated Marginal Means of Mindfulness**

*Conscientiousness*: Results of the test of within-subject effects showed a significant main effect of *time* on conscientiousness:  $F(2, 54) = 4.85, p < .05$ . The time effect tells us that conscientiousness significantly increased from Day 1 to Days 7 and 14. The analysis fulfilled both the Levene test of homogeneity and the Mauchly test of sphericity. Thus, there was no need to adjust degrees of freedom for the average test of significance. The between-subjects main effect (0 and 1) was not statistically significant:  $F(1, 27) = 0.07, p > .05$ . The interactive effect of the condition  $\times$  time on the means of conscientiousness was statistically significant:  $F(2, 54) = 5.5, p < 0.05$ . The intervention

had a different effect on the control and treatment groups' conscientiousness as they continued with the two-week intervention. The estimated marginal means for conscientiousness of both groups will provide more information about the nature of this interaction. Over time, the gap between the control and treatment groups became larger because the mindfulness training improved conscientiousness in the treatment group, whereas it remained stable in the control group (Figure 8).

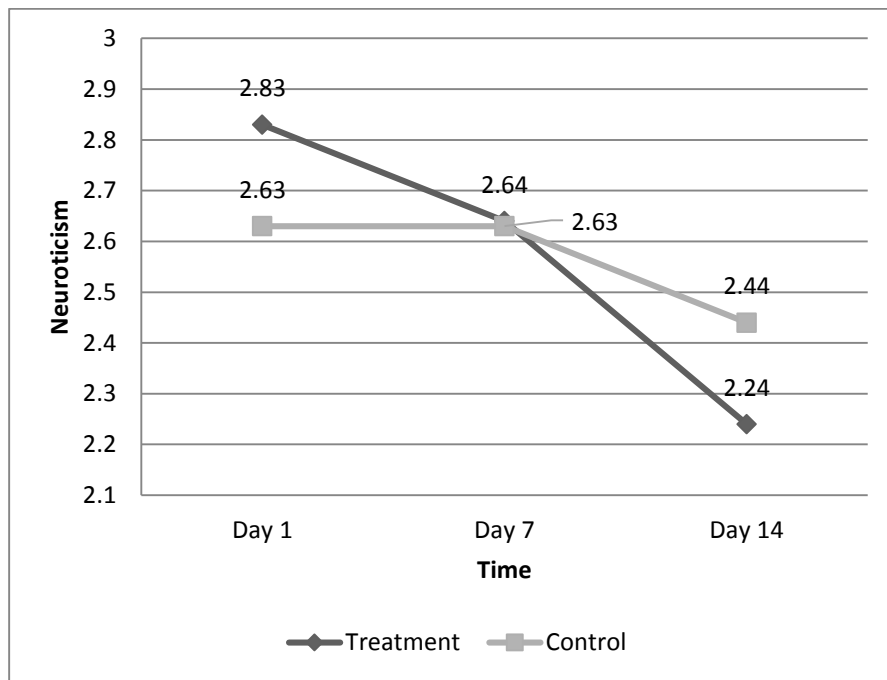


**Figure 8. Estimated Marginal Means of Conscientiousness**

*Neuroticism:* Results of the test of within-subject effects show a significant main effect of time on neuroticism:  $F(2, 54) = 15.8, p < .05$ . The time effect tells us that neuroticism significantly decreased from Day 1 to Days 7 and 14 (Figure 9). Although the analysis fulfilled the Levene test of homogeneity, the Mauchly test of sphericity failed. As result, the more conservative Greenhouse-Geisser results were reviewed to make sure that  $F$ -values were the same. The between-subjects main effect (0 and 1) was not statistically significant  $F(1, 27) = 0.00, p > .05$ . Results showed that the

interactive effect of the condition  $\times$  time on neuroticism was statistically significant:  $F(1.58, 42.7) = 3.8, p < 0.05$ .

Neuroticism decreased significantly in response to the mindfulness training across three measurement occasions. As seen in Figure 9, the gap between control and treatment groups became very small at Day 7 and then became larger at Day 14.

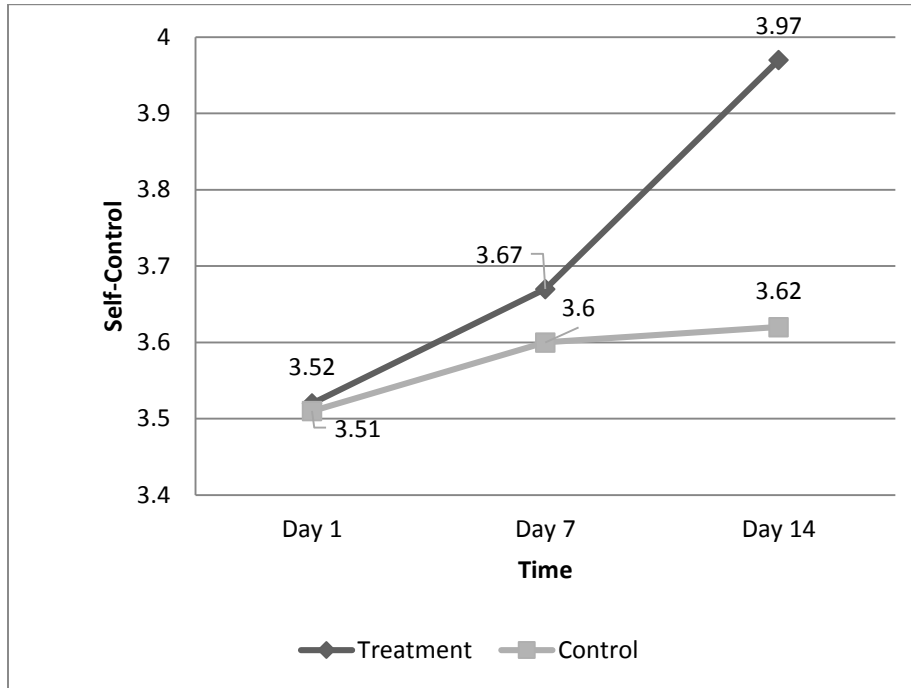


**Figure 9. Estimated Marginal Means of Neuroticism**

*Self-Control:* Results of the test of within-subject effects showed a significant main effect of time on self-control:  $F(2, 54) = 8.5, p < .05$ . The time effect tells us that self-control significantly increased from Day 1 to Days 7 and 14. The between-subjects main effect (0 and 1) was not statistically significant:  $F(1, 27) = 0.48, p > .05$ .

Because the requirements of the both the Levene test and the Mauchly test of sphericity were met, no adjustments were done for the interaction of the variables of *time* and *condition*. The interactive effect of condition  $\times$  time on self-control was statistically significant:  $F(2, 54) = 3.8, p < 0.05$ . Over

time, the gap between control and treatment groups became larger because the mindfulness training increased self-control in the treatment group (Figure 10).



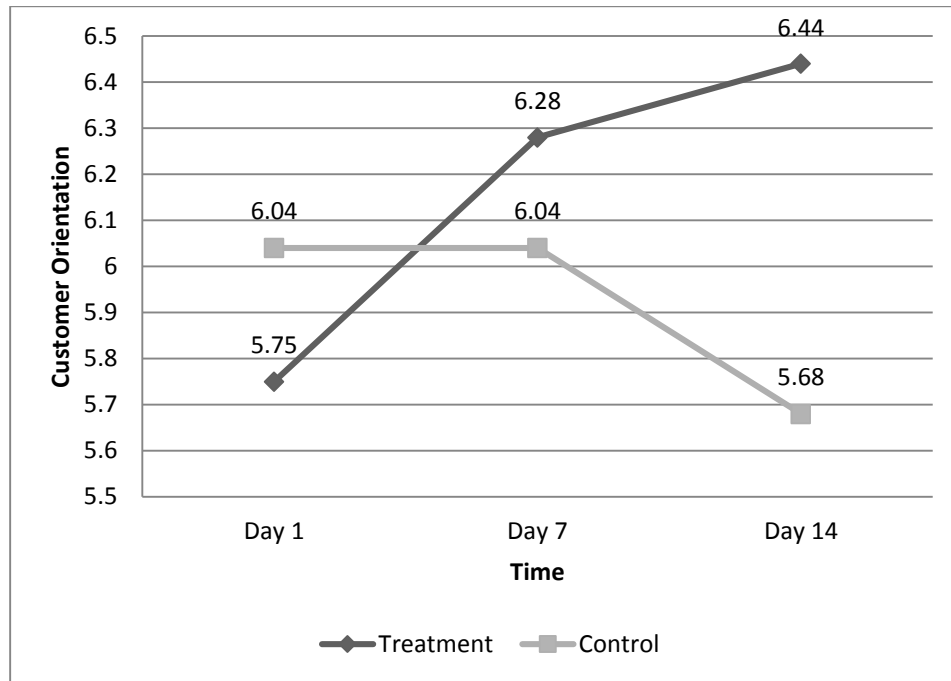
**Figure 10. Estimated Marginal Means of Self-Control**

*Customer Orientation:* Results of the test of within-subject effects showed a significant main effect of time on customer orientation:  $F(2, 54) = 1.5, p > 0.05$ . The time effect tells us that customer orientation significantly increased from Day 1 to Days 7 and 14. The between-subjects main effect (0 and 1) was not statistically significant:  $F(1, 27) = 0.53, p > .05$ .

Customer orientation meets the sphericity requirement and, as such, the  $F$ -value and the degrees of freedom did not need adjustments. The interactive effect of condition  $\times$  time on customer orientation was statistically significant:  $F(2, 54) = 5.64, p < 0.05$ .

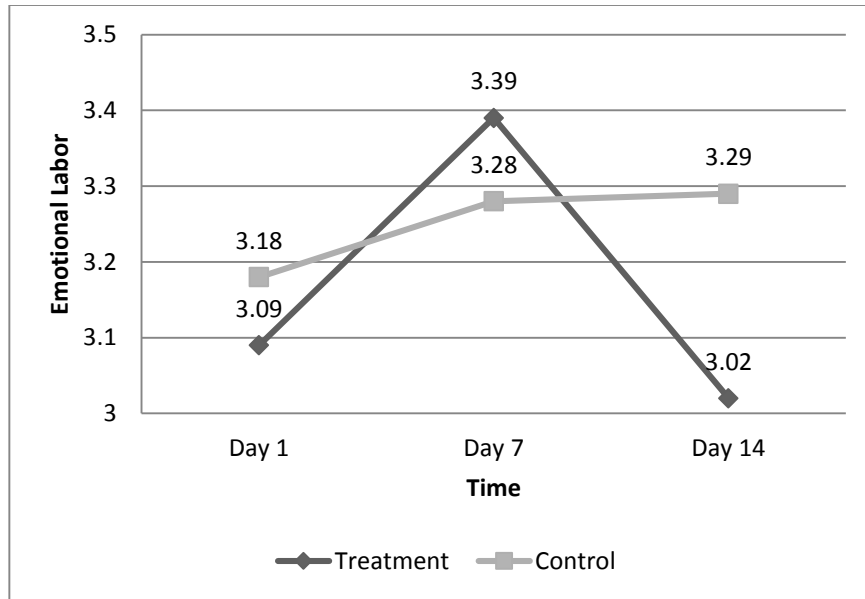
Figure 11 demonstrates a flat trend for the means of the control group in the first week and an increasing trend for the treatment group. Over time, the mindfulness training had a different effect on the control and treatment groups' customer orientation. As both groups went on with the program, the

gap between the control and treatment groups became larger at time 7 and 14 because the mindfulness training program improved customer orientation in the treatment group (Figure 11).



**Figure 11. Estimated Marginal Means of Customer Orientation**

*Emotional Labor:* Emotional labor failed a basic test of the change in effects, the Box Test of Equality of Covariance Matrices. This test examines the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups. Also, the test of main effects for *time*:  $F(2, 54) = 2.08, p > 0.05$ ; main effect for condition –  $F(1, 27) = 0.19, p > .05$ ; and interaction of *time* and *condition*:  $F(2, 54) = 1.5, p > 0.24$  were not statistically significant. The trajectory of change was also unusual. The treatment group's means increased substantially from time 1 to time 2 and decreased from time 2 to time 3 (Figure 12). Thus the pattern of results were uninterpretable. The result was not a surprise considering that emotional labor did not fit in any other analysis of both studies.



**Figure 12. Estimated Marginal Means of Emotional Labor**

## CHAPTER V

### CONCLUSION

#### **Discussion**

The purpose of this study was to determine whether mindfulness relates to customer orientation and to explore whether these relationships are mediated through the personality factors conscientiousness and neuroticism. I focused on these two personality factors because both have been shown to be valid predictors of job performance for all types of jobs (e.g., Barrick, Mount, & Strauss, 1993).

The literature contains evidence of the relationship of neuroticism and conscientiousness with mindfulness (e.g., Giluk, 2009). Studies that focus on the effect of mindfulness on the self-regulation of thoughts, emotions, and behaviors inspired me to question whether trait mindfulness influences the Big Five personality traits, conscientiousness and neuroticism, causing enhancement of the customer orientation dimensions.

Study 1 confirmed the literature findings that conscientiousness and neuroticism are valid predictors of job-related factors (Barrick, Stewart, & Piotrowski, 2002). These results showed a moderately strong and statistically significant relationship between conscientiousness and customer orientation ( $\beta = 0.41, t = 7.07, p < 0.05$ ). As explored earlier, conscientious employees are also dependable. They follow rules, are responsible (Barrick et al., 2001), and protect other people's interests like their own (Barrick et al., 2001). They also have high self-discipline (Costa & McCrae, 1992) and an ability to judge a situation clearly and respond effectively (Costa &

McCrae, 1992; Kabat-Zinn, 1990). It makes sense that conscientious employees also display stronger customer orientation.

Moreover, Study 1 provided evidence supporting the Brown et al. (2002) reported data that neuroticism was negatively and significantly related to customer orientation. Individuals high in neuroticism are anxious, insecure, not in control of their emotions, impulsive, and susceptible to depression and hostility (Costa & McCrae, 1995). Neurotic individuals cannot manage the span of their thoughts and emotions (Baer, 2003; Brown et al., 2007) that affect their judgment and decision-making capabilities at work and in relation to their customers.

What was missing in the literature was the extent to which conscientiousness and neuroticism explain the relationship between mindfulness and customer orientation. The results of Study 1 provide a first step toward supporting a full mediation model, implying partial mediation effects of conscientiousness and neuroticism in the relationship of mindfulness and customer orientation. Both conscientiousness and neuroticism showed significant mediation roles in the hypothesized model, supporting Hypotheses 2 and 3 by explaining 35% of variance in customer orientation. As such, this study is the first to imply that enhanced mindfulness may influence personality factors. This had been suggested as direction for future research – but not tested – by scholars such as Brown and Ryan (2003), Thompson and Waltz (2014), and Sheldon et al. (1997).

One might reasonably question the directionality of the mediation. The alternative model tested switched the role of mindfulness and personality factors, showing that the alternative models did not fit the data as well as the hypothesized model. In switching the role of mindfulness and conscientiousness, the conscientiousness mediation path was not statistically significant and the direct path between conscientiousness and customer orientation was statistically significant. In the case of neuroticism, there was a small mediating effect; however, most of the variance was explained by the statistically significant, strong, and direct relationship of neuroticism and customer orientation – what I expected based on theory and the hypothesized model. In contrast, my hypothesized model provided



evidence of full mediation, with conscientiousness explaining 24% of the variance and neuroticism 11% of the variance in customer orientation.

The present study did not support Hypotheses 4 and 5. Emotional labor showed no relationship with our factors (except with customer orientation) and as such was omitted from Study 1. Although self-control was significantly related to mindfulness and customer orientation, it did not show significant mediation. The reason might be the correlation between neuroticism and self-control, leaving room for just one to act as mediator along with conscientiousness. Future research is necessary to explore this matter and to possibly create measures to capture the theoretically explained common facets of mindfulness, self-control, and customer orientation.

To enhance mindfulness, I designed a 14-day self-training program. My program was substantially shorter and less intense than typical mindfulness programs such as MBSR. Other programs require participants to attend intensive sessions and work directly with mindfulness teachers. Compared to a 10-day training designed by Hülshager et al. (2013), my program showed a higher participant rate (66.7% versus 49.8%); it was less intense, shorter in duration, and easy to follow. My mindfulness intervention took about 15 minutes per day; it is flexible and suited to today's hectic schedule.

The results of Study 2 supported my first hypothesis that a two-week mindfulness program can increase mindfulness in service workers. In addition to this result, it also showed a significant increase in conscientiousness, self-control, and customer orientation and decrease in neuroticism. As expected, emotional labor did not fit well in the model of Study 2.

### **Managerial Application**

Although mindfulness has been the subject of many studies in the last few decades, studies such as the present study that focus on the effect of mindfulness on the job-related factors are rare. Even rarer are reliable programs that are targeted at the normal population. Programs such as MBSR and

MBCT – which were originally created for clinical use – are long, intense, and almost impossible for many organizations to afford.

In a managerial application of the present study, employers may offer such a targeted mindfulness program to their employees to improve their customer orientation. Enhanced mindfulness as a result of this training program would lead to more conscientiousness, less neurotic employees. The results of this study suggest that conscientiousness and neuroticism are the mediators carrying the positive influence of the mindfulness trait onto customer orientation, which positively relates to job performance (Brown et al., 2002), job satisfaction, and less emotional exhaustion (Hülshager et al., 2013). This program is a self-training program in mindfulness that is easy to follow, flexible, short, low cost, and effective. This mindfulness training program is affordable for small organizations and large organizations. The training program can be done on employees' time or at work, possibly before meetings. It can be embedded in already existing well-being programs in organizations or simply promoted as a three- to five-minute break.

### **Contributions**

Results of the present study contribute to the literature on mindfulness and job-related factors, which is in its infancy. It also contributes to the service marketing literature by introducing a new antecedent and mediators for customer orientation. The study was an attempt to fill out the theoretical gap that exists in interpreting the relationship of conscientiousness and customer orientation (Brown et al., 2002).

The study also offers a mindfulness training program that significantly influences conscientiousness, mindfulness, neuroticism, and customer orientation. The study brought the literature one step closer to showing causality in its hypothesized model (Figure 1). The training program of this study was a successful attempt at positively influencing trait mindfulness (between-subjects variability), although it also showed a change in state mindfulness (within-subject

variability). What mattered to me in this study was the change in trait mindfulness because state mindfulness can vary even with one-time, short meditations.

The present study also tested the directionality of the relationship of mindfulness and personality factors, which scholars have been implying (e.g., Brown & Ryan, 2003; Thompson & Waltz, 2007). In a broader sense, it examined the change in personality factors caused by mindfulness training (Sheldon et al., 1997).

### **Limitations and Directions for Future Research**

An inherent problem with survey-based cross-sectional studies like Study 1 is that it is not possible to establish causation. In addition, the sample size for the Study 2 mindfulness training was small. This provided little statistical power for some factors such as conscientiousness and neuroticism, increasing the probability of type II error. Another potential limitation is that the treatment and control groups were not assigned randomly. I tried to add power by conducting a mindfulness intervention in Study 2 to imply that the correlations established in Study 1 showed a causal relation between the enhanced mindfulness trait and customer orientation, mediated by the personality traits of conscientiousness and neuroticism. Future research is needed to test mindfulness training in a larger sample and a randomized treatment/control group.

Although theory supports the effect of mindfulness training on emotional labor, emotional labor here showed uninterpretable relationships to the mindfulness and personality factors in the two studies. Research is required to determine whether mindfulness can replenish the depleted energy caused by emotional labor using measures that are more appropriate.

Self-reports, as a popular method of study are vulnerable because of human perception (Conway & Lance, 2010). In a self-report study, concerns exist about the validity of the measures. My study was dependent on individuals' perceptions of mindfulness, personality factors, and job performance. It would be great to see how other people evaluate an individual on factors such as personality and customer orientation.

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## APPENDIX

### **Mindfulness - MAAS (Brown & Ryan, 2003)**

1. I could be experiencing some emotion and not be conscious of it until sometime later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.
3. I find it difficult to stay focused on what's happening in the present.
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. I forget a person's name almost as soon as I've been told it for the first time.
7. It seems I am "running on automatic" without much awareness of what I'm doing.
8. I rush through activities without being really attentive to them.
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.
10. I do jobs or tasks automatically, without being aware of what I'm doing.
11. I find myself listening to someone with one ear, doing something else at the same time.
12. I drive places on "automatic pilot" and then wonder why I went there.
13. I find myself preoccupied with the future or the past.
14. I find myself doing things without paying attention
15. I snack without being aware that I'm eating

### **Conscientiousness - IPIP (Goldberg, 1999)**

1. Find it difficult to get down to work
2. Pay attention to details
3. Do just enough work to get by
4. Don't see things through
5. Shirk my duties
6. Mess things up
7. Leave things unfinished
8. Don't put my mind on the task at hand
9. Make a mess of things
10. Need a push to get started
11. Am always prepared
12. Pay attention to details
13. Get chores done right away
14. Carry out my plans
15. Make plans and stick to them
16. Complete tasks successfully
17. Do things according a plan
18. Am exacting in my work
19. Finish what I start
20. Follow through with my plans

### **Neuroticism - IPIP (Goldberg, 1999)**

1. Often feel blue
2. Dislike myself
3. Am often down in the dumps
4. Have frequent mood swings
5. Panic easily
6. Am filled with doubts about things
7. Feel threatened easily
8. Get stressed out easily
9. Fear for the worst
10. Worry about things
11. Seldom feel blue
12. Feel comfortable with myself
13. Rarely get irritated
14. Am not easily bothered by things
15. Am very pleased with myself
16. Am relaxed most of the time
17. Seldom get mad
18. Am not easily frustrated
19. Remain calm under pressure
20. Rarely lose my composure

### **Customer Orientation (Brown et al., 2002)**

#### *Enjoyment*

1. I find it easy to smile at each of my customers.
2. I enjoy remembering my customers' names.
3. It comes naturally to have empathy for my customers.
4. I enjoy responding quickly to my customers' requests.
5. I get satisfaction from making my customers happy.
6. I really enjoy serving my customers.

#### *Need*

7. I try to help customers achieve their goals.
8. I achieve my own goals by satisfying customers.
9. I get customers to talk about their service needs with me.
10. I take a problem-solving approach with my customers.
11. I keep the best interests of the customer in mind.
12. I am able to answer a customer's questions correctly.

### **Emotional Labor (Brotherige & Lee, 2003)**

1. A typical interaction I have with a customer takes about .....minutes
2. Display specific emotions required by your job
3. Show some strong emotions
4. Make an effort to actually feel the emotions that I need to display to others
5. Adopt certain emotions required as part of your job
6. Display many different kinds of emotions
7. Express particular emotions needed for your job
8. Hide my true feelings about a situation
9. Express intense emotions
10. Really try to feel the emotions I have to show as part of my job

11. Express many different emotions
12. Resist expressing my true feelings
13. Display many different emotions when interacting with others
14. Pretend to have emotions that I don't really have
15. Try to actually experience the emotions that I must show

**Self-Control Items – Short Version (Tangney et al., 2004)**

1. People would say that I have iron self-discipline.
2. I wish I had more self-discipline.
3. I refuse things that are bad for me.
4. I do certain things that are bad for me, if they are fun.
5. I am good at resisting temptation.
6. I have a hard time breaking bad habits.
7. I am lazy.
8. I say inappropriate things.
9. I often act without thinking through all the alternatives.
10. Sometimes I cannot stop myself from doing something, even if I know it is wrong.
11. I am able to work effectively toward long-term goals.
12. Pleasure and fun sometimes keep me from getting work done.
13. I have trouble concentrating.

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