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The Instruction Of Mindfulness: Developing Standards And Objectives For Mindfulness Training In Graduate Programs

Crystal Rofkahr

THE INSTRUCTION OF MINDFULNESS: DEVELOPING STANDARDS AND
OBJECTIVES FOR MINDFULNESS TRAINING IN GRADUATE PROGRAMS

by

Crystal S. Rofkahr
Bachelor of Arts, University of Arkansas Little Rock, 2006
Master of Arts, West Virginia University, 2007

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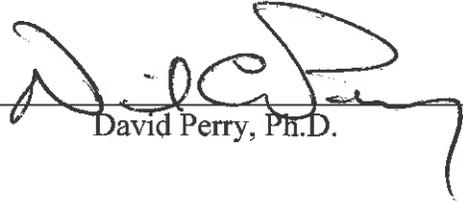Grand Forks, North Dakota

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This dissertation, submitted by Crystal S. Rofkahr in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

_____
Dorlene Walker, Ph.D., Chairperson

_____
Joseph Miller, Ph.D.

_____
David Perry, Ph.D.
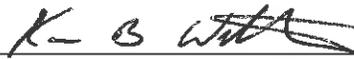
_____
Kara Wettersten, Ph.D.

_____
Randall Clifford Nedegaard, Ph.D.

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

_____
Dr. Wayne Swisher
Dean of the School of Graduate Studies

_____June 13, 2014_____
Date

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TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGMENTS

ABSTRACT

Mindfulness is an effective therapeutic tool for multiple disorders and conditions. A set of standards, methods, assessments, and teacher characteristics had not been formulated to effectively teach future mental health providers mindfulness. This study utilized a Delphi Method to meet this need in the field. This methodology was used to assemble a panel of experts to provide data on the best practices in teaching mindfulness. The experts participated in three rounds of data collection. They provided information pertaining to their ideal and real teaching standards, methods, and assessments. They, then, narrowed down the concepts in each domain until consensus was found between the experts. The results indicated the following: Standards should include the practice of mindfulness, learning about attention processes, compassion skills, learning the definition of mindfulness, and the cognitive and physiological processes involved in mindfulness. Methods should be lecture, discussion, sharing, and practice/experiential. Assessment methods are reflection papers, class discussion, class participation, and teacher evaluation. Last, while collecting this information, it became apparent that teacher characteristics were an important variable for teaching mindfulness.

CHAPTER I

INTRODUCTION

The concept of mindfulness can be found in ancient, and modern contexts in many eastern religions and philosophies including Taoist, Hindu, Jewish Hassidic and Kabalistic, Islamic Sufism's, and Confucian (Goleman, 1988.) They have embedded mindfulness concepts and approaches into tradition and practice. Western approaches to mindfulness are relatively recent and have come into academic focus only within the past thirty to forty years (Epstien, 1995.) Researchers and practitioners have come to view the integration of these bodies of knowledge as a rich source of beneficial techniques for wellbeing (Shapiro and Carlson 2010.)

While mindfulness has a long-standing history with other religions and philosophies, the focus of this project is the instruction of mindfulness as a therapeutic tool. Mindfulness has been found to be beneficial for a number of mental and physical health conditions including, but not limited to depression, anxiety, sleep disturbance, stress, heart disease, autoimmune disorders, and diabetes (Germer, Siegel, and Fulton, 2005; Baer, 2006.) Moreover, mindfulness has been found to be beneficial for client outcome within therapy by providing the therapist with increased ability to build a therapeutic relationship. This is exhibited by increased empathy, compassion, concentration abilities, non-judgment of clients, and emotion regulation (Hofmann, Sawyer, Witt, and Oh, 2010; Zeidan, Johnson, Diamond, David, Goolkasian, 2010.)

1

There are no formal agreed upon standards, methods, or types of assessment related to teaching mindfulness within counseling training programs. This creates a need for identification of teaching standards, methods, assessments, and teacher characteristics. The purpose of this research sought to understand the standards, instructional methods, assessment strategies, and teacher characteristics used in teaching mindfulness practice within counseling training programs by using an expert review process (the Delphi Method). The expert review panel will come to a consensus on the best standards and methods to utilize when teaching mindfulness within graduate training programs.

In order to provide a background for this undertaking, a review of the academic literature related to therapeutic mindfulness is presented next. Specifically, the review of literature attempts to shed light on the definitions of mindfulness, to illustrate its use and effectiveness within applied psychology in clinical settings, and to illustrate the importance of instructional standards and objectives when developing a curriculum.

Mindfulness Definitions

Historically, mindfulness has been called "the heart" of Buddhist meditation. It is at the core of the teachings of the Buddha (Gunaratana, 2002; Hanh, 1999; Bodhi, 2002.) Traditionally, mindfulness has been described by the Sanskrit word *dharma*, which carries the meaning of *lawfulness* as in "the laws of physics" or simply "the way things are," as in the Chinese notion of *Tao* (Kabat-Zinn, 2003.) In Pali, the language of Buddhism, mindfulness is the English translation of the Pali words sati sampajana. (Shapiro and Carlson, 2009.) Experts in the field of psychology have been attempting

to define mindfulness in a manner that makes sense for today's culture and needs. This section provides definitions that have been postulated for current use.

Jon Kabat-Zinn (1990) describes mindfulness as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally. (p.7)" Mindfulness is not only described as a state of awareness but as a practice that fosters awareness (Germer, Siegel, & Fulton, 2005, Linehan 1993.) This means, "being aware of what is happening in the mind and body as it is occurring" (Epstien, 1995 pg. 142.) This concept is described by Epstien (1996) as "When we think of our bodies as "things" that are separate from us, and our minds as "places" where we think, we foster our own sense of alienation. (p. 144)" It is through mindfulness that this multiplicity can be united as one in order to surrender to our true selves.

It can be problematic to define mindfulness without first describing meditation because meditation is considered a vehicle toward attainment of mindfulness (Chopra, 2000.) Mindfulness can be achieved without meditation, but meditation cannot be achieved without mindfulness. For this purpose, this paper uses the term mindfulness throughout; however, it should be noted that meditation is assumed to be an integral part of mindfulness even when not specifically mentioned.

According to Germer et al. (2005) mindfulness is paying attention to the task at hand without having our attention entwined with the past or future and without rejecting the current moment with judgment. This type of awareness is also termed bare attention. Bare attention is awareness without conditioned emotional and judgmental responses. It involves knowing what you are experiencing emotionally, physically, and cognitively without adding anything to it or labeling it (Shapiro and Carlson, 2010;

3

Epstien, 1995.) According to Baer (2006) mindfulness has to do with particular qualities of attention and awareness that can be cultivated and developed through meditation. Mindfulness includes an affectionate, compassionate quality within the attending and a sense of "openhearted", friendly presence.

Lastly, mindfulness is thought to bring about a different perspective on an individual's worldview. Without mindfulness an individual's worldview is considered to be limited, limiting, filled with conditioned and unconscious responses, and may resemble that of a dream more than wakefulness (Chopra, 2009; Kabat-Zin, 1994.)

According to Brown and Ryan (2003) it is often easier to describe what mindfulness is *not* than what it is; the following are a few examples of mind*les*sness, adapted by Germer et al. (2005).

- Rushing through activities without being attentive to them.
- Breaking or spilling things because of carelessness, inattention, or thinking of something else.
- Failing to notice subtle feelings of physical tension or discomfort.
- Forgetting a person's name almost as soon as we have heard it.
- Finding ourselves preoccupied with the future or the past.
- Snacking without being aware of eating

Researchers in psychology continue to struggle to operationalize a definition of mindfulness. It is important to remember that mindfulness originated from the east as part of a philosophy of life and it has proven difficult to define mindfulness without losing a portion of the meaning that is integral to the whole. Furthermore, meditation is considered to be the vehicle to obtain mindfulness. A better understanding of meditation is imperative to fully understand what mindfulness looks like and can be achieved.

Meditation

Meditation is an element of all of the world's major spiritual and philosophical traditions (Goleman, 1988.) Although it is most usually associated with religions common to India, meditation is practiced within Taoist and Hindu yogis, Jewish Hassidic and Kabalistic *dillug* and *tzeruf*, Islamic Sufism's *zikr*, Confucian quiet-sitting, Christian contemplations, and Buddhist meditations (Goleman, 1988; Walsh, 1983.) Within these traditions, meditation is not considered a technique but a way of life (Kabat-Zinn, 2003; Chopra, 2000.) This approach has been highly debated as western psychology implements meditation as a therapeutic tool (Kabat-zinn, 1993; Shaprio and Carlson, 2010.)

While it is difficult to describe meditation in an operationalized manner, it has been growing in importance and focus in the field of psychology. The meditative traditions themselves say that there are multiple meditations and that emphasize mental development that is thought to be beneficial in mental capacities such as calm and concentration and positive emotions such as love and joy (Goleman, 1988). However, the western definitions tend to rely on aspects of self-regulation with a specific focus on attention and concentration.

According to Kabat-Zinn 1993, meditation is witnessing the various conditions of the mind and releasing oneself from the clutches of the mind through awareness. Further, Chopra (2009) describes meditation as using the "mind to simply, naturally and effortlessly transcend thinking and to experience a deep state of restfully alert consciousness." (p. 56) "Meditation is the art of focusing mind, restraining thoughts and looking deep into yourself. Practicing meditation can give you a better

understanding of your purpose in life and of the universe, as well as provide you with certain physical and mental health benefits."(Thich Nhat Hanh, 1990, p. 8.) These definitions are similar in that the main goal of obtaining attention and awareness is an effort to have a finely attuned consciousness to experiences in the present (Shapiro, Brown, & Astin 2011; Kabat-Zinn 1994.) According to Epstein (1995), meditation is a slowing down that enables closer examination of the mind. The purpose is to "question the true nature of the self and to end the production of self-created mental suffering (p. 4.)"

Different Types of Meditation

Often the term "meditation practice" is used in the literature. This refers to the actual act of meditation. The practice of meditation can be divided into two methods that are sometimes integrated (Goleman, 1972; Shapiro and Carlson, 2010; Germer et al., 2005); concentrative meditation and insight meditation.

Concentrative (*samatha)* meditation is a type of meditation that involves putting focus on an external or internal image, symbol, mantra, or sensation. External objects could be a candle flame or image of a deity. Internal objects could include a spot on the body, words (mantra), or kinesthetic feeling such as the breath, or image (Germer et al, 2005; Chopra, 2000; Shapiro and Carlson, 2010; Epstien, 1995). When practicing concentrative meditation the mind is gently brought back to the object of focus whenever the individual becomes aware that their mind has wandered. It is expected for the meditator's mind to wander as a normal consequence of being human (Chopra, 2000; Germer et al, 2005; Orme-Johnson, 1987).

Vapasana (insight) meditation is an internal observation practice. This type of meditation is to be aware of thoughts, feelings, or images as they appear in the mind, and not to modify them. The meditator will focus on the breath. When their mind wonders the meditator will simply be aware of the experience and sit with it till it passes (Germer et al, 2005; Kabat-Zinn, 1994.) This is different than concentration meditation where the focus would be shifted back to the breath or mantra as soon as the meditator is aware that there mind has wondered.

Insight and concentrative meditations have both been investigated within the literature. They are both used within psychology, however in this study insight meditation is used predominantly because it is the preferred meditation used in Mindfulness Based Stress Reduction therapy (MBSR). In fact, due to the increased use of MBSR in the field of psychology the use of insight meditation has increased as well. The paragraph below will refer to this increase.

Mindfulness Studies in Psychology Literature

While no prevalence studies exist that address the commonality of mindfulness as a therapy tool, a literature search was completed using PsycINFO, with the goal of comparing the number of search results found, using the key word "mindfulness" in the year 1990, and again in the year 2014. Using the key word mindfulness in 1990 resulted in only ten articles found. In 2014, using the same key word, "mindfulness", yielded 4,403. Clearly there has been a significant increase in mindfulness related studies in the psychology literature.

In addition to a PsychINFO search, Shaprio and Carlson (2010) used the Computer Retrieval of Information on Scientific Projects (CRISP) to find National

Institutes of Health (NIH) funded scientific grants. In 1998 there were zero grants in progress using the term "mindfulness-based." However, by 2008 there were 44 studies funded by grants through NIH. More specifically, there was a significant spike in grants starting in 2004; the grants went from 5 to 32 within that year.

Searching "mindfulness" within the Family Therapy Networker magazine, an organization used widely by practicing psychologists, for the year of 1998 yielded only 1 result. However, when searching the archives for the year of 2014, 101 results were found. In fact, the entire October 2011 edition was devoted to mindfulness and meditation. Further, in 2014, there is a mindfulness web series offered in the online version of the magazine. Additionally, mindfulness is listed as one of fifteen most popular topics for the Family Therapy Networker website and magazine. The findings from these three resources indicate the increasing attention that mindfulness is gaining in the field of psychology, though a prevalence study (regarding use among therapists) is still warranted.

Application of Mindfulness Therapies

Mindfulness within the field of psychology dates back as far as Freud in the 1930's (Epstien, 1995). In 1971 the American Psychiatric Association called for investigation into meditations' effectiveness. This propelled cardiologist Herbert Benson's research in transcendental meditation, which to date has produced hundreds of journal articles. Currently, mindfulness has found its place in a number of different evidence based therapies. However, it is not only utilized within these therapies. Mindfulness is also used alone as a therapeutic tool. Therefore, it is important to understand the effectiveness of mindfulness as a component of an evidenced based

therapy, and alone as a therapeutic tool. To date, a growing list of novel therapies are bursting into the field of psychology. A brief introduction to the most prominent mindfulness-based therapies will provide background for ways that mindfulness can be used in therapy.

Different Types of Therapies

Jon Kabat-Zinn in 1979 developed mindfulness-based stress reduction therapy (MBSR) to combat chronic stress conditions. Zindel, Segal, Mark Williams, and John Teasdale created Mindfulness Based Cognitive Therapy (MBCT) in 2002, which is largely based on MBSR with some of the basic concepts of Cognitive Therapy. Mindfulness-Based Eating Awareness Therapy (EAT) was developed by Jean Kristeller (1999) to aid individuals who struggle with some sort of disordered eating. Alan Marlatt (2010) created Mindfulness-Based Relapse Prevention; it is based on MBCT while keeping important aspects of relapse prevention. Following is a brief review of these therapies and their effectiveness.

Mindfulness Based Stress Reduction (MBSR)

MBSR was created for use with chronic pain and for stress-related conditions. MBSR builds from the Buddhist philosophy. It was created in order to keep mindfulness meditation as close to its roots as possible while helping heal people from chronic pain. Kabat-Zinn (1982) does not believe that mindfulness should be a short -term solution to behavioral or physical problems. This is why he developed MBSR to help train individuals to continue mindfulness for a lifetime.

The therapy is an intensive eight-week program that includes weekly sessions. These session last between two to three hours. Mindfulness practice is expected

intensively as homework throughout the program. In addition, around the sixth week of the training a full-day intensive mindfulness meditation workshop is required. MBSR can be applied to many different types of concerns. It is the philosophy of MBSR that the classes should not be separated by disorder. Rather it is required that individuals living with a variety of disorders be included in each group. The classes usually have about 30 participants. MBSR does not partition the groups to specific disorders because foundationally MBSR promotes that anyone regardless of condition can learn to be mindful, which can benefit their internal state (Baer, 2006; Kabat-Zinn, 1982.)

MBSR requires intense participation and commitment; therefore the sessions begin with an orientation. This orientation explains all of the requirements, including the 45 minutes per day, 6 days a week home mindfulness practice. In addition, at the end of this orientation the participant is expected to verbally agree to the conditions of the eight-week program. A wide variety of exercises are completed throughout the program including a raisin exercise, body scan, sitting meditation, hatha yoga, walking meditation, and mindfulness in daily life activities (such as folding clothes, brushing teeth, or cooking)(Baer, 2006; Kabat-Zinn, 1982.)

During the all day meditation session required during the sixth week participants are expected to silently engage in all of the previous mindfulness activities. The silence is intended to encourage intensive self-awareness and to aid in non-judgment without slipping into conditioned avoidance strategies (Baer, 2006; Kabat-Zinn, 1982.)

Effectiveness of MBSR. Kabat-Zinn et al. (1992) conducted a series of studies on anxiety that showed a decrease in anxiety with the use of mindfulness. The research

was a no comparison group study with 22 participants diagnosed with generalized anxiety disorder (GAD). The researchers found the participants improved in their symptomology of GAD and generalized fears. More specifically, Hamilton (HAM-D; Hamilton, 1960) and Beck Anxiety (BAI: Beck and Steer, 1990) questionnaires were used to assess for anxiety level. Participant's scores on the Hamilton and Beck post-intervention and at 3-month follow up were reduced significantly. The Hamilton [F(2,32)=13.22 $p < 0.001$] and Beck [F(2,32) = 13.22; 9.83 $p < 0.001$].

This study was followed up three years later by Miller, Fletcher, and Kabat-Zinn (1995) in which they re-assessed 18 of the original 22 subjects. The researchers used repeated measures analysis and showed maintenance of the gains in the original study. Additionally, the researchers were able to demonstrate compliance of long-term mindfulness meditation. However, the study conducted by Kabat-Zinn et al. (1992) did not have a control group and half of the patients were taking anxiolytics during the intervention. Additionally, in the three-year follow up by Miller et al. (1995), half of the subjects received additional therapy for anxiety over that three-year period.

Biegel, Brown, Shapiro, and Schubert (2009) completed, what they report as the first clinical trial for adolescents. The randomized trial was used to assess the effectiveness of MBSR for adolescents (14-18) with a range of different diagnoses from an outpatient psychiatric facility. The participants were mostly female (73.5%) and white (45.1%) and the average age was 15.35. The most common disorder was mood disorder (49%).

The manualized protocol developed by Kabat-Zinn (1990) was modified for an adolescent population that included reducing homework time and excluding a daylong

11

meditation retreat. The treatment as usual (TAU) group received individual or group therapy and/or psychotropic medication. The assessment points for the study were pre, post, and three-month follow-up. The results indicated that the group receiving MBSR showed higher percentage of improvement diagnostically (45%) over the five-month period. They also reported decreased symptoms of anxiety, depression, and increased self-esteem and sleep quality.

A single blind randomized controlled trial was conducted by Creswell, Myers, Cole, and Irwin (2009) investigating a chemical blood level and hormone named CD4+ T lymphocyte, an indicator HIV-1 progression to AIDS. The study took two groups of participants from a community of individuals with HIV. The participants were randomly assigned to either the 8-week MBSR group or the 1-day stress reduction seminar group. Blood was assessed at baseline and post-intervention. The levels of CD4+lymphocyte were determined by a complete blood count and flow cytometry. The results showed that adherence to the mindfulness program, assessed by class attendance, mediated the effect that the treatment had and CD4+ lymphocyte declined. In other words, participants experienced positive benefits from the MBSR intervention. The study had a small sample size and did not have any long term follow up assessments, however, it does provide initial information that mindfulness may be a beneficial additional treatment for individuals with HIV and that the benefits are in proportion to the amount of mindfulness training received.

Mindfulness Based Cognitive Therapy (MBCT)

MBCT is similar to MBSR in that it requires intensive formal meditation practice as a key ingredient for the therapy. Segal,Williams, and Teasdale (2002)

developed MBCT to include meditations, yoga, daily mindfulness exercises, and body scans. It is conducted in 8-weeks (the same duration as MBSR). It only includes up to 12 participants, which is lower than MBSR and it does not include an all day intensive workshop (Baer, 2006; Segal et al, 2002.)

More specific to MBCT is the practice of "mini meditation" which uses a three-step process to focus on daily mindfulness. The first step is to focus on internal awareness. The participant put their awareness on immediate sensations on body thoughts and emotions by asking "What is my experience right now?" The participant is expected to be aware with non-judgment and to sit in the experience rather than push it away. The second step is to place full attention on their breathing process. And the third step asks participants move their awareness to the full body noticing sensations (Baer, 2006; Segal et al., 2002.)

An interesting aspect of MBCT is that it does not use traditional cognitive therapy activities that aim to change thoughts. Instead MBCT utilizes the elements of cognitive therapy that aim to work on a "decentered approach to internal experience" (p. 17.) The antecedent, behavior, and consequence model model (ABC) is used to help facilitate discussion around automatic thoughts (Baer, 2006; Segal et al., 2002.)

Effectiveness of MBCT. A study using MBCT as treatment for chronic recurrent depression was conducted by Barnhofer, Crane, Hargus, Amarasinghe, Winder, & Williams, 2009. The participants were expected to have had three previous bouts of depression and a history of suicidal ideation. A randomized experimental design included a treatment group and a non-treatment group. The treatment group (N=14) received MBCT and the non-treatment group received "treatment as usual"

13

(TAU) (N=14). The participants were all middle-age (40's), two-thirds were women and half were married or living with significant others. The TAU included a weekly meeting with their primary care physician, medication management, psychological interventions, and/or self-help books. These were based on the protocol that the individual already had in place before starting the study. The MBCT group received the manualized MBCT treatment developed by Segal et al. (2002). The only deviation from the manual was to address severe suicidality by implementing crisis plans.

Barnhofer et al. (2009) used the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) and the Beck Scale for Suicide Ideation (BSS: Beck & Steer, 1991) to assess symptomology. The MBCT group reported symptom decrease from severe to mild levels while the treatment as usual group did not report any decrease in symptoms. This study is limited by its small sample size, however it does offer further evidence that mindfulness based therapies appear to be potentially effective for depression.

While it appears that mindfulness based therapies are effective for depression, Ma and Teasdale (2004) found that mindfulness based therapies can be beneficial in prevention of relapse for depression. Ma and Teasdale (2004) completed a randomized controlled study of patients who had suffered with depression and had experienced three or more previous episodes. Ma and Teasdale (2004) examined patients from three separate treatment sites who then were randomly placed into either treatment as usual (TAU) or TAU plus MBCT. The sample population consisted of 75 patients who were currently in remission from depression. They were between the ages of 18-65, and had a history of recurrent major depression. Two of the episodes were within the past 5

years with at least one of those episodes within the past 2 years. They also had a history of treatment with an antidepressant but had not been taking the medication for at least 12 weeks preceding the pre-test. The patients also had a baseline score of less than 10 on the Hamilton Rating Scale for Depression (HAM-D).

The participants, along with the HAM-D, were given the Beck Depression Inventory (BDI; Beck, Steer and Garbin, 1988) and the Measure of Parenting Style (MOPS) (Parker et al., 1997). The TAU group was told to seek help from their family doctor or other sources as they normally would if they became symptomatic over the course of the study. The groups were followed at 3-month intervals for a year. According to this study mindfulness based therapy reduced relapse from 78% to 36% in 55 patients. A total of 100% of the TAU group relapsed compared to only 39% of the MBCT group. This protective effect appears to be the most apparent in participants with four or more episodes of depression.

Mindfulness Based Eating Awareness Training

Kristeller developed MB-EAT in 1999. The therapy was based on MBSR and CBT. It integrates eating meditations regarding body shape, weight, and eating related processes. The conceptualization of eating concerns is that they are a part of a larger systemic issue for example, emotion regulation, behavior regulation, and cognitions. Mindfulness is used in this therapy to increase awareness of automatic behavior patterns and to help regulate emotions (Kisteller, Baer, and Quillian-Wlever, 2006).

Effectiveness of MB-EAT. MB-EAT uses mindfulness to bring awareness to eating behaviors, satiety, taste satisfaction, and emotions associated with eating. Women received a treatment based on an MBSR outline with MB-EAT infused into the

teachings and meditations. The women in the treatment condition received a combination of MBSR and Mindfulness-Based Eating Awareness Training (MB-EAT) (Kristeller and Hallett, 1999).The measures used were the Kentucky Inventory of Mindfulness Skills questionnaire (Baer et al., 2004); Perceived Stress Scale (Wheaton, 1994); State-Trait Anxiety Scale-Trait Form (STAI: Spielberger et al., 1970); Dutch Eating Behavior Questionnaire (Van Strien et al., 1986); and The Block 2005 Food Frequency Questionnaire (Block, 2005). The telomerase activity was measured preserving the cells and then using a hemocytometer by the Trypan blue exclusion method.

The results of this study showed an increase in telomerase activity in the treatment group compared to the waitlist group, however it did not hold enough statistical power (a non-significant treatment effect of 0.18). There were correlations between increase in telomerase and improvement in psychological distress and eating behavior in the treatment group. The study provides vital information about mindfulness interventions and suggests that mindfulness may be a contributing factor in decreasing psychological distress and in improving the eating behaviors that can lead to an increase in telomerase. This increase in telomerase can lead to better immune functioning and longer overall life.

Utilizing similar methodology, Kristeller and Hallett (1999) completed a no comparison group study involving 18 subjects with binge eating disorder. The researchers used a modified MBSR program and found significant decrease in severity and number of binges after completion of the program. They postulated this was due to increase in eating control, satiety, and sense of mindfulness. In addition, the subjects

scored significantly lower on the Beck anxiety and depression scales. However, attributions that the MBSR program caused these changes cannot be made due to the absence of a comparison group. However, these authors are now working on their third large national grant concerning mindfulness and eating that promise to produce evidence of effectiveness shown through a more rigorous methodology (Kristeller, 2010).

Mindfulness Based Relapse Prevention (MBRP)

Marlatt (2010) developed the MBRP by combining mindfulness-based practices with cognitive behavioral relapse therapy. The concept behind using mindfulness in the prevention of relapse is that mindfulness can aid in the metacognitive processes and in skill development. MBRP trains the individual to be able to "surf" urges and cravings (Bowen, Chawla, and Marlatt, 2011). According to Marlatt, prevention of substance use is largely based in cognitive and behavioral theories of risk avoidance. Mindfulness is thought to aid in this process by bringing awareness of automatic thoughts and behaviors.

Effectiveness of MBRP. A randomized controlled study investigating the efficacy Mindfulness-Based Relapse Prevention (MBRP) with substance use disorders was conducted by Bowen, Chawla, Collins, Witkiewitz, Hsu, Grow, Clifasefi, Garner, Douglass, Larimer, and Marlatt (2009). They had 168 participants who were randomly assigned to the MBRP group or TAU. The participants had all received inpatient or outpatient treatment. The assessment points were pre, post, 2 and 4 post-intervention. The TAU group participated in 12-step programs and process-oriented therapy. The MBRP group followed the manualized protocol developed by Bowen, Chawla, and

Marlatt. The results indicated significant improvement in days of substance use, craving, awareness, and acceptance. The MBRP participants had lower rates of substance use at the 4-month post-intervention period than the TAU group.

The above illustrates that mindfulness-based therapies are increasingly being developed for a number of concerns and are found effective. Each of these therapies utilizes mindfulness techniques somewhat differently. However, they all extend one central point; mindfulness is a key ingredient in reducing symptoms and improving well-being in a wide range of populations (Baer, 2006). While mindfulness-based therapies are beneficial, mindfulness as an intervention tool alone is also increasing in the field of psychology. It is important to understand the effectiveness of mindfulness separate from a specific therapy.

Mindfulness as a Psychotherapeutic Intervention Tool

In regards to mindfulness as an intervention tool, the scientific literature is new and rich. For example an early study by Kabat-Zinn (1985) found that 50% of subjects had chronic pain reduction greater than 50 percent. Of that chronic pain reduction 65 percent experienced at least a 35 percent decrease. In addition to physical health, researchers have investigated the effects of mindfulness on cognitive processes such as working memory, attention, and emotion regulation. (Linehan 1993; Germer et al, 2005; Shapiro & Carlson, 2010). It is postulated that mindfulness helps teach an individual how to manage their emotions more effectively (Linehan, 1993; Germer et al., 2005; Shapiro and Carlson, 2010; Lesh, 1970). Further, it helps to develop emotion regulation in the brain (Corcoran, Farb, Anderson, and Segal, 2010; Davis and Hayes, 2011). Corcoran et al., (2010) postulate that metacognitive awareness, decreases in

worry as a result of disengagement from "perseverative cognitive activities," and increased attention and working memory are all a result of better emotion regulation due to mindfulness meditation. This is based on a number of empirical studies conducted prior to 2010 (Chambers, Lo, and Allen 2008; Ramel, Goldin, Carmona, & McQuaid, 2004).

Hofmann, Sawyer,Witt, and Oh (2010), completed a meta-analytic review studying mindfulness-based therapies for depression and anxiety. The objective was to look at the effect size for mindfulness interventions across studies. The investigators did not differentiate between different types of mindfulness therapies for this study. The criteria for inclusion in the study was to include a mindfulness based intervention, have participants with a diagnosable psychological or physical disorder, have an adult population, the intervention could not be coupled with ACT or DBT, have a measure of anxiety or mood at both pre and post intervention, and have enough data to provide appropriate effect size analyses.

As the researchers came across studies that were similar they chose the study with the highest effect size or if the study was done thoroughly they asked the authors to provide supplemental data or information. Additionally, most of the studies found were assessing MBCT, MBSR, or an adjusted model of one of the two. For this reason, the researchers exclude those studies in which the duration of treatment was shorter than MBCT or MBSR and/or the interventions were not conducted in person.

The analysis was based on 39 studies with a total of 1,140 participants. The effect size estimates were for anxiety (Hedge's g=0.97) and mood (Hedge's g=0.95) for improving symptoms in the overall sample. Hofmann et al. (2010) stated this was

unrelated to publication year or number of treatment sessions. This suggests that mindfulness based therapies have robust potential for treating anxiety and depression in clinical populations.

In regards to physical health and mindfulness, a study by Kabat-Zinn (1985) found that 50% of subjects had chronic pain reduction greater than 50 percent. Of that chronic pain reduction 65 percent experienced at least a 35 percent decrease. A study examining fibromyalgia conducted by Kaplan, Goldenberg, Galvin-Nadeau (1993), found a 50 percent improvement in pain and sleep. These studies were again some of the first and are being replicated.

Zeidan, Johnson, Gordon, and Goolkasian (2010) developed a study to compare mindfulness meditation to sham mindfulness mediation. They were interested in reducing negative mood and cardiovascular variables. The participants received either 3 days of mindfulness mediation or a sham meditation. The participants (N=82) were undergraduate students with 34 males and 48 females. None of the participants had any prior meditation experience. They were assessed for heart rate, blood pressure, mood, and anxiety. They were assessed before and after the intervention. The results showed that the mindfulness meditation was more effective than the sham mediation in reducing negative mood, fatigue, and heart rate. This study illustrates the importance of properly teaching, learning, and practicing meditation to receive the desired positive effects.

In another study, Chambers, Lo, and Allen (2008) conducted a study including 20 novice meditators. The meditators were involved in a 10-day intensive meditation retreat. This group was compared to a control group. The meditation group, in

comparison to the control group, showed less rumination, decreased negative affect, and significantly better working memory and attention. It should be noted that differences were not detected prior to the meditation retreat between the groups.

Moreover, Zeidan, Johnson, Diamond, David, Goolkasian (2010) completed a study comparing meditation training with listening to a recorded book. The experimental group received four sessions of meditation training. The control group received four sessions of listening to a recorded book. The participants had no prior meditation experience. They were students at a southern university who were interested in learning meditation. The participants were 61% white with a median age of 20 years. The meditation group received basic mindfulness meditation skills training. The control group listened to JRR Tolkein's *The Hobbit*. The students completed the CES-D (Radoff, 1997); Freiburg Mindfulness Inventory (Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006); The State Anxiety Inventory (Spielberger, 1983); The Controlled Oral Word Association Test (Benton, 1989); The Symbol Digit Modalities Test (Smith, 1982); The forward/backward digit span Wechsler Adult Intelligence Scale-Revised (WAIS-R: Wechsler, 1981); and The Computer Adaptive N-back Task (Strauss, Sherman, & Spreen, 2006). The study found that 4 days of meditation significantly increased mindfulness scores; along with cognitive, attention, and executive processing efficiency compared to the control group. More specifically, this brief mindfulness training significantly improved visuo-spatial processing, executive functioning, working memory, and enhanced ability to maintain attention. This is important according to Zeidan et al. (2010) because previous studies with similar results have all implemented longer protocols of meditation. This is the first study to

show this type of results within a short time span (4 days.) Additionally, both groups showed a decrease in anxiety and an increased mood. The efficacy literature is still new and researchers encourage therapists to be wary of using mindfulness as a 'cure-all' therapeutic technique and to be knowledgeable of what mindful techniques work best for which population and psychological conditions (Keng, S.L., Smoski, M.J., & Robins, C.J., 2011.) However, it is flourishing with evidence that mindfulness is beneficial in treating behavioral and physical difficulties.

Summary

As evidenced above, mindfulness is shown to be effective for clients living with varying conditions irrespective if it was used in the form of a mindfulness-based therapy or as an intervention tool alone. Mindfulness has been found to be useful in depression, depression relapse, cognitive skills, attention, anxiety, and sleep (Germer et al., 2005). Furthermore, mindfulness has been found as an empirically validated treatment, useful in building a therapeutic alliance, increasing empathy, attention, and affect tolerance (Germer et al., 2005). In addition, as previously mentioned, the prevalence of mindfulness-based therapies has increased since the mid 1990's, as previously shown by the review of psycINFO articles and the Family Therapy Networker. This illustrates a need for training programs to teach therapists in training mindfulness and meditation skills.

<div align="center">

Practitioner Training for Mindfulness

</div>

Importance of Mindfulness Training

No literature, to date, includes information about training therapists on mindfulness techniques (Bare 2003; Chopra 2014.) In addition to the lack of training

information, there is no published information on how to assess competence in mindfulness application and training. The literature states the need for effective and practical means for teaching therapists in training mindfulness (Shaprio et al., 2008; Germer et al., 2005; Kabat-Zinn, 2003; Baer 2006; Christopher, 2006; Gehart and McCollum, 2010). Sadly, the research does not offer suggestions or a solution for the lack of training offered to therapists in training. Only one of the current therapies that utilizes mindfulness has formal training (MBSR) (Shaprio et al.,1980; McCown, Reibel, and Micozzi, 2010; Christopher, Christopher, Dunnagan, Schure; 2006). According to Christopher et al., (2006), it will be important to find ways that formal mindfulness practice can be integrated into practicum and supervision settings within graduate-level programs.

Gehart and McCollum (2008) and Christopher et al. (2006) hypothesized that implementing mindfulness into graduate program curricula can aid in preventing burnout and increase over all well-being, self-care, and improved client outcomes. In 2006, when Christopher et al. looked for literature that addressed teaching mindfulness in counseling psychology programs specifically, they found none. This is what prompted them to develop a program for graduate level students in the mental health fields.

As a result of Christopher et al.'s (2006) literature search, Schure, Christopher, and Christopher (2008) set up an elective graduate-level course to teach mindfulness, yoga, and Qigong. They then set up a focus group of 11 students that were analyzed using qualitative methods. The researchers found that students felt the course had a significant impact on their personal and professional lives. The students also mentioned

23

they experienced a positive impact on their work as therapists and students. They felt more comfortable with silence and they reported feeling more attentive during therapy (Schure, 2008).

Gehart and McCollum (2008) developed a program that integrated mindfulness teachings into an existing practicum experience. They implemented assigned and in-class readings, in-class mindfulness exercises, journals, and regular mindfulness practice. The students were expected to complete 5-10 minutes of mindfulness daily including, breathing exercises, mantra based meditation, walking meditation, or a different type of preferred mindfulness practice. Gehart and McCollum (2008) used Schure et al.'s (2008) and Kramer, Meleo-Meyer, and Turner 's (2008) programs as a model for their own program.

More recently, McCollum and Gehart (2010) conducted a study examining marriage and family therapy practicum student's use of mindfulness through thematic analysis of journals kept during student's experiences. Students described feeling more present, more balanced during different modes of therapy, and more comfortable in the development of acceptance and compassion. All of these programs are short-term in comparison to an entire 3-6 year graduate program. However, it should be mentioned there are other studies that found no differences between mindfulness and client outcome (Stratton, 2006) and some that actually found negative correlations with client outcome (Stanley et al. 2006, Bruce, 2006.) It will continue to be important for researchers to continue to examine mindfulness as a research construct.

Furthermore, Kabat-Zinn (2003), maintains the point of view that therapists cannot teach mindfulness in an authentic way if they have only briefly been engaged in

the method by a workshop or professional seminar. Kabat-Zinn, continues to state that mindfulness is "both a work of a lifetime and paradoxically, the work of no time at all, because its field is always this present moment in its fullest." This type of work cannot be understood in a day, week, or month (p.149). The above has laid out the importance for mindfulness to be taught in a standard manner in graduate programs. In order to teach anything in a standard way, specific criteria need to be established according to education leaders. Maintaining standards, methods, and assessments are what make up effective teaching (Borich, 2014.) The following section will explain the definitions of the needed components of an effective curriculum. It will also detail the importance of having these components within a teaching curriculum.

Effective Curriculum Development

Introduction

Instructional and assessment specialist Ralph Tyler (1949) introduced the concept of goal directed instruction. His influence in assessing the impact of learning by designing educational curriculum was seminal. Tyler described a sequence of effective instruction: 1) identification of the results desired for learning; 2) determining a level of evidence (assessment) that learning has occurred; and 3) and then designing activities that will produce the desired results. Elements of this sequence have been identified as standards, assessment measures and instructional methods. Over the years standards have been established on local, state, and national levels. In 2009 the American Association for the Advancement of Science developed benchmarks for science education. In 2001 A National Research Council was developed to investigate standards in education. Standards for social studies curriculum were established in

2010. Moreover, in 1987 the National Board for Professional Teaching Standards (NBPTS) was established in order to establish standards for effective teachers and to certify teachers. There are numerous other councils and committees that have been formed over the past years to insure that curriculum standards are created and rigorous. With this said, it is important to have a cursory understanding about the significance of standards, methods, and assessments, which is detailed below.

Standards

Standards identify what must be accomplished in a course of instruction. They clarify what teachers must teach and students must learn. Standards are intended to help teachers teach in a way that influences critical thinking (Wiles and Bondi, 2010). Jerome Bruner in 1963 suggested there needed to be criteria for instruction. He established 4 criteria in 1963 and then in 1968 he expanded this to 10 criteria. These criteria have been the benchmarks that researchers have used in developing standards since that time. Bruner (1996) believed that instruction should have clear expectations of the learner and teacher, it should specify the ways the knowledge would be structured, how the materials would be presented, and the nature of rewards and punishments in the process of learning and teaching.

Mager (1984) defines standard as the result of what you want the student to learn. He developed the what, how, and why in regard to developing instructional standards. Mager believed there were three purposes to having instructional standards.

1. Without clearly defined standards there is no clear ground to instructional material.

2. Without a standard in place it is difficult to know if it has been met or not.

3. Standards provide students with a way to organize their own efforts.

While, the literature provides evidence of a long-standing understanding for the need of standards in education, the next step in the process is to establish the understanding of how the standards will be accomplished, by what methods.

Methods

A teaching method involves the "how" in teaching. This may include lecture, experiential learning, or conducting role-plays. There are numerous methods of instruction within a classroom, which can make understanding which method to use complex. In 1956, Bloom devised a classification system of important characteristics for learning. This classification system can aid the teacher in developing appropriate teaching methods. The educational behaviors are as follows: remembering (remembering from long-term memory); understanding (the construction of meaning around a specific topic); apply (apply the procedure to a familiar task); analyze (break material down and understand how each part relates to the other parts); evaluate (make judgments based on the material learned); and create (putting pieces of the learned material together coherently). It is through Bloom's work that many types of methods for instruction have been developed in an attempt to meet these criteria. According to (Wiles and Bondi, 2010), small group discussion, demonstration, game, independent study, large group discussion, lecture, and/or presentation are few types of methodology that can be employed in teaching.

Teacher Characteristics

In the past, teacher characteristics were primarily based on the "goodness" of the teacher. However, through the years a more complex understanding of what makes a teacher an effective teacher as emerged (Borich, 2014.) A major portion of the effectiveness of an instructor is the patterns of teacher-student interaction that influence the cognitive and affective performance of students. Further, Good and Brophy (2007), conducted a study showing that the interaction between teacher and learner consistently provided improved student outcomes, greater motivation to learn, increased problem solving, and improved learning skills. There are key teaching behaviors and helping behaviors that are conducted by an effective teacher (Willi, 2006; Borich, 2008.) There are numerous behaviors that have been studied in this regard, but for the purpose of this study only a few will be discussed.

Student engagement refers to the amount of time a student spends learning in your classroom. The teacher's ability to actively engage the students and keep redirecting the student's attention to the task at hand is considered to be an important teacher characteristic or behavior (Evertson and Emmer, 2012.) According to Emmer and Evertson (2012), providing a non-evaluative environment for students to actively participant in experiential learning is an effective teacher behavior for student engagement. In fact, increased student engagement in the classroom results in better student success rate. In addition, it is thought that students are more successful when they have the opportunity to use practice and repetition to learn a skill. Moreover, a teacher that provides project-based learning (experiential learning) is thought to

promote increased critical thinking skills and promotes low error rates, which can increase student self-esteem (Good and Brophy, 2007.)

Another teacher characteristic involves the art of asking process questions to facilitate discussion. An instructor that is able to ask appropriate questions pertaining to process are more likely to engage their students in high-level problem solving, arouse curiosity, and encourage creativity. However, none of these characteristics will have as strong an impact without considering the teachers affect. According to Kuh, Kinzie, Smith & Whitt (2005) a teacher's enthusiasm is of upmost importance in promoting student engagement as well as achievement. Teacher enthusiasm can be expressed through vocal inflection, gesture, eye contact, and animation (Tischler, 2005). Kyriakides, Christoforou, and Charalambous (2013), investigated the teaching factors of the dynamic model of educational effectiveness, which includes questioning, teaching modeling, application, classroom as a learning environment, management of time, and assessment. The study found that what students "do" during the lesson, and the teacher-student "interaction" are related to better student learning. In conclusion, teacher behaviors are an important aspect of student learning. It has been found to be important for teachers to provide a non-judgmental learning space, provide specific affect when interacting with students, and ask appropriate process questions. Assessment was mentioned by Kyriakides et.al, (2013), as an important piece of instructional effectiveness. An explanation about the importance of assessment follows.

Assessment

'How do we know that we are teaching what we think we are teaching?' This is a common question in education. The desire to answer the question as definitively as

possible has in part, driven a national debate over the importance of assessment within classrooms. There are some key components to keep in mind as an instructor to understand if students are learning what the instructor is teaching (Marzano, 2006.)

One component is to determine the topic area the instructor intents to assess. The instructor needs to make sure to have clear and detailed learning objectives and that the learners are aware of the learning expectations prior to assessment. Once the topic area has been clearly communicated, the instructor will assess whether or not the learner is able to apply the concepts being assessed (Marzano and Heflebower 2011; Mager, 1984.)

At this point, the instructor needs to decide which method to use in order to assess the learners ability to apply the content knowledge, which is the second component to effective assessment (Marzano, 2006.) There are multiple methods of assessment. Marzano and Heflebower (2011) explain that expanding the types of assessment available for learners can help more accurately demonstrate student learning. More specifically, they discuss options such as letting the learner develop the assessment; using probing questions during instruction, and implementing unobtrusive assessments. Unobtrusive assessments are methods of assessment in which the learner is unaware of being assessed. Marzano (2010) proposed three types of assessments obtrusive (paper/pencil), unobtrusive (experiential or observation), and student generated. Black and Wiliam (1998) conducted a study that summarized over 250 studies on formative assessment. Formative assessments are considered to be a "use of" assessment that is conducted while learning is in progress. "It is not a test but a process – a planned process involving a number of different activities (Popham, 2008 p. 6.)"

The study found effect sizes of .70 indicating that formative assessment dramatically enhances student achievement.

Next, the instructor needs to make sure that the assessment they use is a quality valid and reliable assessment, which is the third component. It should have clear expectations of what is to be learned, detailed explanations in regard to feedback for the learner, and it should engage the learner in critical thinking about the topic area (Marzano, 2006; Davies, 1992; Mager, 1984.) According to Morzano (2006), for every assessment a student takes it contains some part error (observed score = true score + error score). This further illustrates the importance to assess often during the course of instruction and to utilize multiple methods of assessing the information (Marzano, 2006.) In conclusion, assessment in the classroom is needed to provide the teacher with important information regarding their teaching effectiveness and student learning.

Summary

"Learners do not simply receive knowledge; rather they actively construct knowledge through interacting with the social, cultural, and linguistic context in which an experience occurs (Nieto & Bode, 2012 p. 5.)" Research has indicated that it is important to establish appropriate teaching standards, methods to achieve those standards, assessments to understand the effectiveness of those methods, and teacher characteristics for effective teaching. For this reason, this study is seeks to understand the teaching standards, methods, assessments, and teacher characteristics that comprise instructional practice used in teaching mindfulness by instructors in academic courses related to mindfulness.

Purpose of the Study

I have provided evidence that research has shown that mindfulness is effective in multiple settings and can be used for multiple purposes. In fact, mindfulness techniques are increasingly being used within the field of psychology (Zeidan, 2010; Daubenmier et al. 2011; Hofmann et al. 2010). For example, mindfulness has been found to be useful in depression, depression relapse, cognitive skills, attention, anxiety, and sleep (Germer et al., 2005). Furthermore, mindfulness has been found as an empirically validated treatment, useful in building a therapeutic alliance, increasing empathy, attention, and affect tolerance (Germer et al., 2005).

As mentioned in the above literature, many mental health providers are increasingly utilizing mindfulness-based therapies or mindfulness alone as an intervention tool. The key piece that was missing from the literature, however, was how to train future therapists in these techniques or therapies. A few programs offer classes or workshops, however no counseling program to date, offers long-term mindfulness training. However, Kabat-Zinn (2003), maintains the point of view that therapists cannot teach mindfulness in an authentic way if they have only briefly been engaged in the method by a workshop or professional seminar. This lack of research and understanding of how to effectively teach mindfulness propelled further investigation into the needed components of effective teaching.

The above-mentioned research concerning effective teaching strategies brought to light the importance of teaching standards, methods, assessment, and teacher characteristics. However, even within the few programs that offer some sort of mindfulness training, there is a lack of research in the field concerning these concepts

key-teaching concepts. Understanding the effective components of teaching will help to understand the effectiveness of the few courses that are taught about mindfulness and any future courses that are developed. Due to the lack of research and the heighten use of mindfulness in the mental health field, it is important to understand what ingredients are needed to effectively teach mindfulness in mental health programs. The purpose of this study was to gather important information from experts in the field to identify standards, methods, assessment, and teacher characteristics for teaching mindfulness in graduate programs.

CHAPTER II

METHODS

Given that the purpose of the study is to identify the standards, methods, assessments, and teacher characteristics the Delphi method was the best tool to accomplish this goal. The Delphi method is supported in literature as a method of collecting data that helps build consensus (Herlihy and Drufrene, 2011). It relies on experts to provide opinions around issues that are difficult to quantify. It is designed as a group communication process that, in this case, aids in program planning (Hsu and Sandford, 2007). This method uses multiple rounds of data collection. Through a series of questionnaires, the panel of experts will provide their expertise. The idea is that the panel will come to an agreement; this is usually done within three or more rounds (Hsu and Sandford, 2007; Skulmoski, Hartman, & Krahn, 2007). These rounds offer the researcher the use of iterations, which helps the experts to reevaluate their responses in previous iterations. The advantage of using this technique is that it offers anonymity for the participants. This is important when implementing a group-based synthesis because it keeps participants from feeling coerced or manipulated by others in the group dynamic (Dalkey, 1972).

Participants

According to Hsu and Sandford (2007), participants are considered experts in the field that is under study. Also, generally there is no exact criterion found in the

literature to broadly used when selecting participants for the expert panel. Oh (1974) stated that choosing appropriate participants is solely up to the researchers' discretion. It is most common practice to use a nomination process to solicit experts (Jones & Twiss 1978). Expertise in this methodology is typically defined as having knowledge or skills that were demonstrated by leadership in professional organizations, presentations at national conferences, years of teaching in an academic area, or publications (Cabaniss, 2002).

For this study the experts were chosen based on their experience teaching some aspect of mindfulness practice in an academic setting. The experts that were invited to participate in the study were also asked to nominate a colleague they felt met the criteria for having taught mindfulness in a graduate program. The participants were selected from a variety of geographical locations. With this in mind, the following criteria was used to select our participants:

➢ Individuals who teach in graduate related counseling programs. The content of the course needs to contain an emphasis in mindfulness.

➢ Individuals who have published in academic journals at least twice regarding mindfulness and therapists in training.

➢ Individuals who teach other mental health providers mindfulness in a continuing education setting.

Participants in this Study. Thirty-two individuals were invited to participate as an expert in this study. They were sent an email (Appendix A) detailing the purpose of the study and the expectations of the study. From those 32 individuals 10 other individuals were nominated to participate in the study. Thirteen experts agreed to

participate in the study however; one expert never completed the survey resulting in 12 experts remaining. One participant did not complete the final round of data collection, leaving the study with a total of eleven experts. The expert's years of experience ranged from 28 years to 5 years. Six of the experts were female and five were male. They were from all regions of the United States and all taught at a major university.

Procedure

Email invitations explaining the study with a link to the survey were sent out to the possible participants. If the participants decided to participate in the study they were asked to sign the consent form and complete the survey. The invitation contained the instructions for the first survey, the survey, a consent form, and further explanation of the Delphi process (Appendix A and E). The participants were contacted on four separate occasions (including the initial contact via invitation email), for each round of questions. The information below provides an overview of the procedures by data gathering round. A more detail description of the results of each round is found in the results chapter.

Round One Qualitative Data

Participants were invited to respond in a qualitative nature to questions that were broad and open-ended in order to "cast a wide research net" (Skulmoski et al 2007 p 10). These questions were based on three general areas of questioning; the expert's real and ideal teaching practices in regard to Standards or classroom competencies, Methods of teaching, and Assessment. The purpose for asking about real and ideal teaching practices was to ensure that the answers elicited were what the experts thought was the most important aspects of teaching mindfulness regardless if they implement

them or not. The questions can be found in Appendix B. They were also provided space to add any additional comments they felt would be beneficial to the topic of the study. Once the experts completed the survey, it was immediately available to the researcher via Qualtrics.

Round Two Survey Development

In accordance with the methods of a Delphi study the responses from round one were narrowed down into themes for each appropriate category including standards, methods, and assessment. As a result of the content of the responses, it was clear that a fourth category needed to be developed concerning teacher characteristics. These categories were then used to develop a survey for round two. Effort was made to use the participant's own words within the survey questions, giving the participants the benefit of each other's thinking and providing participants the opportunity to correct any misinterpretations (Hsu and Stanford, 2007). The round two survey asked the participants to put the themes into two categories, important to include in a curriculum or not important to include in a curriculum. There was space provided for the participants to give explanation for the responses, pose questions or concerns, or provide feedback in general.

Round Two

The survey developed in Round 1 was sent to the participants via email with a link to Qualtrics. The survey for this round can be found in Appendix C. Once the responses were received, the researcher kept only the responses that were ranked as important to include by 67% of the experts. If a response received a rank below 67% than it was dropped from the survey. By convention in Delphi methodology, generally

speaking, a two-thirds (67%) rule is commonly used in Delphi studies to define

agreement among the participants (Chou, 2002; Dawson & Brucker, 2001).Items

dropped from the survey can be found in Appendix G These results were used to

develop the next survey.

Round Three Survey Refinement

The results, ranking the importance from second round questions were resent to

participants in a revised survey. This survey was comprised of the same four categories

standards, methods, assessment, and teacher characteristics. The survey questions for

this survey can be found in Appendix D. The participants were asked to place the

curriculum items in order of importance for each category. They were also asked to

comment on items that needed to be edited or removed. The final results were derived

from this round of data. The next chapter presents the results from each round.

CHAPTER III

RESULTS

The purpose of this research study was to identify commonalities in the instruction of mindfulness within mental health training programs. A Delphi methodology was used to identify and categorize standards, methods, assessments, and teacher characteristics. The nature of the Delphi method requires summarization and condensation of results from each round in order to proceed with subsequent processes. The intent of the study was to better identify key teacher standards, methods, assessments, and teacher characteristics involved in teaching mindfulness practices that could lead to research for a best practices model. For this reason, the results of each round are provided separately below. The results broken down are described using the terms category, items, and types. Category refers to the four main constructs that are examined in this study. Items refers to the content that fall under each category and types is used to distinguish the different methods that where developed within the methods category.

Round One Qualitative Data

The basis of round one was to gather qualitative data about real and ideal teaching practices. Interestingly, the experts acknowledged the real practices, but made no distinction between ideal and real practices. Participants were asked to respond to their real and ideal teaching practices in regard to teaching mindfulness. They were

asked to respond in paragraph form to these questions. The researcher took the results and broke down the answers into themes for each category.

In order to utilize the participants own wording for the items the researchers did not collapse any of the possible themes. This was done to keep the researcher from making assumptions about the meaning of the items. This round brought to light an additional category concerning Teacher Characteristics. The experts agreed that Teacher Characteristics were an important category to consider when teaching mindfulness. This category emerged because the data did not fit in the other categories.

Standards Round One

The Standards category was broken down into eight basic standards with a total of 27 items that were then included within those eight Standards for the second wave survey. Eight basic Standards were identified with a total of 28 items.

Table 1

Standards Categories and Items

Standard	Items
Standard A **Mindfulness Techniques and Practice**	**1A** basic meditation practices **2A** formal meditation practices **3A** informal meditation practices **4A** demonstration of these practices
Standard B **Demonstrate a variety of meditative traditions**	**1B** sitting meditation **2B** loving kindness meditation **3B** walking meditation **4B** movement meditation
Standard C **Attention and Awareness**	**1C** components of attention **2C** integration of awareness and creativity **3C** components of awareness

Table 1 continued

Standard	Items
Standard D **Cognitions and Physiology**	**1D** thoughts in relation to mindfulness **2D** relationship between mindfulness and CBT **3D** the relationship between mindfulness and physiological processes **4D** the relationship between mindfulness and cognitive processes
Standard E **Science and Research**	**1E** the science behind mindfulness **2E** science behind the benefits to mindfulness **3E** the research regarding mindfulness
Standard F **Dimensions of Mindfulness**	**1F** definition of mindfulness **2F** the difference between mindfulness lifestyle beyond practice **3F** 7 attitudes of mindfulness **4F** multicultural importance within mindfulness
Standard G **Emotions**	**1G** how to deepen positive emotions **2G** long-term experience of mindfulness **3G** compassion skills
Standard H **Teaching**	**1H** ability to teach others mindfulness **2H** awareness of developmental needs of population teaching

The table above shows the themes that were derived for the Standards category.

The themes were separated into eight different standards. It is important in the Delphi

method to use the experts own words in this first round of data to maintain integrity of

the items (Chou, 2002), which is why the items were not collapsed any further during

this round. Each standard had at least two items under it, with the most being four

items.

Methods Round One

The qualitative data yielded a large amount of data concerning the Methods used to teach mindfulness. The Methods category was broken down into five different types of methods including methods for practice, lecture, discussion, sharing, and assignment. The practice category was the largest with 26 items. The lecture type had 6 items, the assignment type had 5 items, the discussion type had 4, and the sharing type had 3 items. As a result the Methods category had a total of 44 items.

Table 2

Methods Category First Round Results

Methods	Items
Method A Practice	**1A** meditation **2A** mindful breathing **3A** mindful movement **4A** sitting mediation with focusing the breath as the home base with instruction to include awareness to whatever draws the attention away **5A** meditation **6A** basic kindness practice **7A** eating exercise **8A** listening to music **9A** experiential practice inside class and outside class **10A** attention to breath **11A** attention to putting on a mindful body **12A** attention to sound **13A** guided visualizations linked to breath **14A** home practice **15A** class practice **16A** formal and informal practice (body scan, mindful breathing, eating, moving, speaking) **17A** Langer-based practices (curiosity, best version of self, making fine distinctions) **18A** yoga **19A** practice noticing pleasant moment **20A** unpleasant moments **21A** stressful moments **22A** difficult communications

Table 2 continued

Methods	Items
	23A noticing consuming chemicals and food **24A** noticing consuming messages and information **25A** an intensive day of mindfulness **26A** creating a community to foster practice after class.
Method B Lecture	**1B** lecture on theories of mindfulness **2B** didactic teaching **3B** explanation of practice **4B** difference between thinking and awareness **5B** stress and the stress cycle **6B** how the mind works within mindfulness (attention center, language center, automatic vs. controlled thinking, and affect)
Method C Discussion	**1C** discuss theories of mindfulness **2C** reading assignments **3C** mindfulness practice experiences **4C** how to apply mindfulness to daily life
Method D Assignment	**1D** complete assigned readings **2D** read science portion of Fully Present: the science and practice of mindfulness **3D** present student presentations in area of interest **4D** present student presentation involving the clinical applications of mindfulness **5D** conduct role plays
Method E Sharing	**1E** students will share mindfulness practice experiences after each practice **2E** thoughts on mindfulness practice **3E** share experience in groups

The table above contains the methods category and its items from the first round results. Due to the large amount of Methods responses this category was broken down into 5 types of methods. The largest type was practice that had 26 items. The smallest type was sharing. It could be assumed from this first round data that practicing mindfulness is considered an important method for teaching mindfulness.

Assessment Round One

The Assessment category was organized into formal and informal assessments. This category had 8 formal and 9 informal assessments methods. It ended up with 18 total items.

Table 3

First Round Data for the Assessment Items

Assessment	Items
Assessment A Formal	**1A** teacher evaluation **2A** qualitative and quantitative program assessment methods **3A** course evaluation **4A** questionnaires **5A** one-on-one interviews post-teaching **6A** student presentations **7A** reflection papers **8A** student papers
Assessment B Informal	**1B** student journals **2B** class participation **3B** group and individual meetings **4B** role plays **5B** readings **6B** the course is not graded due to modeling a non-judgmental nature **7B** focus groups **8B** check in one year after class to evaluate the if practice has continued **9B** a way to track and confirm if students are practicing outside of class

The table above details the first round data for the Assessment and teacher characteristic items. The Assessment category ended up with 18 items that ranged from having a "non-graded format" to requiring "student presentations."

Teacher Characteristics Round One

The Teacher Characteristic was separated into two categories. The "the teacher will have" had 6 items and the "the teacher needs" ended up with 6 items. The teacher characteristic category had 12 total items.

Table 4

First Round Data for Teacher Characteristics

Teacher Characteristics	Items
Teacher Characteristics A The teacher will have	**1A** obtained training in mindfulness from experts **2A** current personal practice of mindfulness in order to share experiences with students **3A** an ability to apply non-judgment to self and students **4A** the students and self back to the present moment regularly **5A** focus on experiential and applied activities **6A** experiences of previous training and current practice to share with students
Teacher Characteristics B The teacher needs	**1B** to reflect on his/her own state **2B** to retain a commitment to critical thinking **3B** to be aware of contextual issues in class **4B** to use a grounded tone and affect **5B** to expect appropriate writing competencies **6B** to be aware of the limitation of language around mindfulness

The Teacher Characteristic category was established after the first round of data because all of the experts reported that Teacher Characteristics were vastly important in teaching mindfulness. This category was added and obtained 12 total items.

The survey based on the results from round one was drafted to investigate the level of importance for each item in each category. The experts were asked to decide rather an item was important to include or not important to include when teaching mindfulness. The results of this round were used to further narrow down important items to include for each category. The statistical analysis of the data consisted of turning the rates of agreement into a ratio of *include* verses *not include* responses. The ratio was compared to a two-thirds decision rule, and the items were included if they were equivalent or greater than two-thirds.

Standards Round Two

The process described above decreased the Standards from 8 to 6 and decreased the items from 28 to 13. Also, the researcher removed the emotions standard because the experts ratings eliminated all of the items except for the compassion item, which was merged into the mindfulness techniques and practice category and the attention and awareness standard was renamed attention by the researcher.

Table 5

Standards Considered Important to Include (Number of Experts who Agreed)

Standard	Items with number of experts who agreed
Standard A **Mindfulness Techniques and Practice**	**1A** Basic meditation practices (9) **2A** Informal meditation practices (10) **3A** Compassion (9) **4A** Demonstration of these practices (8)
Standard B **Demonstrate a variety of meditative traditions**	**1B** Sitting meditation (10) **2B** Loving Kindness meditation (8) **3B** Walking meditation (8) **4B** Movement meditation (7)

Table 5 continued

Standard	Items with number of experts who agreed
Standard C **Attention**	**1C** Components of attention (10)
Standard D **Cognitions and Physiology**	**3D** The relationship between mindfulness and physiological processes (9) **4D** The relationship between mindfulness and cognitive processes (9)
Standard F **Dimensions of Mindfulness**	**1F** Definition of mindfulness (7) **4F** Multicultural importance within mindfulness (8)

The table (5) above contains the changes that resulted from the second round of data for the Standards category. The Standards decreased from 8 to 6 standards and decreased the items from 28 to 13. The emotion standard was dropped due to low agreement of all items in the category except for compassion. Compassion maintained a high ratio of importance with 9 experts feeling it should remain, at this point, compassion was merged into Mindfulness Techniques and Practice category. The attention and awareness standard was renamed to attention because the one remaining item was focused on attention without awareness mentioned. Last, the teaching and science and research standards were completely dropped from the category because none of the items within the two Standards were found to have at least a two-thirds agreement by the experts. It should be noted that most of the items maintained a high level of importance in most all the Standards except for the items within dropped standards.

Methods Results Round Two

The round two results decreased the Method items (all categories) from 44 to

23. The table below provides details about what was dropped from the methods

category.

Table 6

Methods Considered Important to Include (Number of Experts who Agreed)

Category	Item (number of experts who agreed)
Method A **Practice**	**1A** Practice, Practice, Practice (10) **9A** Experiential practice inside class and outside of class (10) **10A** Attention to breath (10) **14A** Home practice (10) **3A** Mindful movement (9) **5A** Meditation (9) **15A** In-class practice (9) **18A** Yoga (8) **26A** Creating a community to foster practice after class (7) **4A** Sitting meditation focusing on the breath as a home base with instruction to include awareness of whatever draws the attention away (8)
Method B **Lecture**	**1B** Theories of mindfulness (9) **3B** Explanation of practice (8) **4B** Difference between thinking and awareness (8) **6B** How the mind works within mindfulness practice (attention center, language center, automatic vs controlled thinking, affect priming) (7)
Method C **Discussion**	**4C** Start discussions on how to apply mindfulness in daily life (10) **3C** Mindfulness practice experiences (10) **1C** Theories of mindfulness (9) **2C** Reading assignments (8)
Method E **Sharing**	**3E** Students will share experience in groups (10) **2E** Their thoughts on mindfulness practice (9) **1E** Their mindfulness practice experiences after each practice (8)
Method D **Assignment**	**1D** Students will complete assigned readings (7)

The table above shows the results for the Methods category, all types. The total number of items in all types of Methods decreased from 44 to 23. The assignment type only had one remaining item that barely maintained a two-thirds approval from the experts. The practice type remained the largest category for Methods.

Assessment Results Round Two

The round two results decreased the Assessment items from 18 to 5. The table below provides details about what was dropped from the Assessment category.

Table 7

Formal and Informal Assessments Considered Important to Include (Number of Experts who Agreed)

Assessment	Items
Assessment A Formal Class discussion	**1A** teacher evaluation (10) **3A** course evaluation (10) **7A** reflection papers (8) **8A** student papers (9)
Assessment B Informal	**2B** class participation (7)

The table above provides the changes made after round two within the assessment category. The Assessment items decreased from 21 to 5. It should be noted the majority did not accept the requirement that the class should be a "non-graded" course. Also, some type of evaluation at the end of the course had 100% acceptance rate by the experts.

Teacher Characteristics Results Round Two

The round two results decreased the Teacher Characteristics items from 12 to 9.

The table below provides details about what was dropped from the Teacher

Characteristics category.

Table 8

Teacher Characteristics Considered Important to Include (Number of Experts who Agreed)

Teacher Characteristics	Items
Teacher Characteristics A The teacher will have	**1A** obtained training in mindfulness from experts (10) **2A** current personal practice of mindfulness in order to share experiences with students (10) **3A** apply non-judgment to self and students (10) **4A** bring students and self back to the present moment regularly (9) **5A** focus on experiential and applied activities (9)
Teacher Characteristics B The teacher needs	**1B** reflect on his/her own state (9) **2B** retain a commitment to critical thinking (8) **3B** aware of contextual issues in class (7)

The table above provides the changes made after round two within the Teacher

Characteristics category. There was a high consensus in regard to teachers needing to

have training in mindfulness from experts, ability to apply non-judgment to self and

students, and to have a personal practice of mindfulness. Overall, the Teacher

Characteristics category decreased from 12 to 9. Some items such as "use grounded

tone and affect" was dropped due to a lack of consensus.

Round Three

The last round of the study asked the experts to rank order, edit, or remove the items within each category. Many participants commented that it was difficult to place the items above or below other items because they felt they were all equally important. In fact, there was very little variability between the rankings for each item. Moreover, many commented on having difficulty ranking standard items because they felt some were repetitive. As a result, the mentioned repetitive items were collapsed into one standard leaving five total standards, as recommended by more than half of the experts. Any items or categories that the experts agreed upon were repetitive were merged together at this point. Moreover, the experts did not want any of the items to be removed completely from the category. With this information, the researcher complied the final results, which are below (see Table 9 -12).

Table 9

Final Results for Standards

Standards	Items
Mindfulness Techniques and Practice	• Basic meditation practices • Informal meditation practices • Demonstration of these practices • Compassion • Sitting meditation • Loving Kindness meditation • Walking meditation • Movement meditation
Attention	• Components of attention
Dimensions of Mindfulness	• Definition of mindfulness • Multicultural importance within mindfulness
Cognitions and Physiology	• The relationship between mindfulness and physiological processes • The relationship between mindfulness and cognitive processes

Table 10

Final Results for Methods

Method	Item
Practice	• Practice, practice, practice • Meditation • Experiential practice inside class and outside of class • Attention to breath • Mindful movement • Yoga • Creating a community to foster practice after class • Sitting meditation
Lecture	• Theories of mindfulness • Explanation of practice • Difference between thinking and awareness • How the mind works within mindfulness practice (attention center, language center, automatic vs controlled thinking, affect priming)
Discussion	• Start discussions on how to apply mindfulness in daily life • Mindfulness practice experiences • Theories of mindfulness • Reading assignments • Students will share experience in groups • Their thoughts on mindfulness practice and experiences
Assignments	• Students will complete assigned readings

Table 11

Final Results for Assessments

Assessments	Item
Formal	• A course evaluation • Teacher evaluation • Student papers
Informal	• Reflection papers • Class discussion

Table 12

Final Results for Teacher Characteristics

Teacher Characteristics	Item
The teacher will have	• obtained training in mindfulness from experts • current personal practice of mindfulness in order to share experiences with students • ability to apply non-judgment to self and students • the students and self move back to the present moment regularly • a focus on experiential and applied activities
The teacher needs	• to reflect on his/her own state • to retain a commitment to critical thinking • to be aware of contextual issues in class

The tables above is the compellation of the results of the standards, methods, assessments, and teacher characteristics that were found by consensus of the experts to be the most important to use when teaching mindfulness in graduate programs. Because the experts did not want to make many changes during this round, only the repetitive items were merged. The "demonstrate a variety of meditative traditions" standard was merged into the "mindfulness techniques and practice" standard as recommended by all eleven of the final group of experts. The "sharing" method was merged into the "discussion" method as recommended by all of the experts.

Conclusion

The study started with 100 items over all the categories. This was decreased to 50 total items once the experts came to consensus. The Standards category started with a total of eight Standards, which was decreased to five Standards. The Methods were divided into different types. The Method types decreased from 5 types to 4 types. The assessment and Teacher Characteristic categories both decreased in items as well. The experts were in general agreement about specific items that they felt where important to include in regard to Standards, Methods, Assessment, and Teacher Characteristics. A discussion of the results will follow in the next chapter.

CHAPTER IV

DISCUSSION

The purpose of this study was to understand the standards and teaching practices used in the instruction of mindfulness in graduate programs. Using the Delphi method, experts came to consensus on standards, methods, assessments, and teacher characteristics. In this chapter, I provide a discussion of the findings for each round, each category, and a proposed model for instruction.

Round One

In round one, the participants provided qualitative responses illustrating their understanding of the real and ideal teaching practices in mindfulness. The researcher broke down the narrative responses while keeping the language and structure the participants provided. The experts interestingly stated that the teaching practices they were already using in their classroom were the ideal teaching practices. Additionally, the study was set to only investigate three key concepts in teaching mindfulness, however, upon review of the results in round one, it became apparent that a fourth category was impetrative. The category of teacher characteristics was birthed and added to the study. The importance of teacher characteristics was stressed in the comments of all of the experts. For example, "We can only teach what we know from our own direct experience. If the teacher can't embody mindfulness in class, the students will learn

little of value, and may actually be worse off than when they started." This matches the statements of concern made by Kabat-Zinn (2003), that mindfulness would become a catch all behavioral technique that does not adequately embody the essence of mindfulness without proper training of those teaching it.

Another important point made by the qualitative narratives provided by the experts in round one was the importance of practice. The practice of mindfulness by the instructor and students was mentioned in teacher characteristics, standards, and methods categories. Mindfulness is described as a practice in the literature, it makes sense that practicing mindfulness as an instructor and as a classroom tool would show up within the first round of data collection. Also, round one led to the identification of the variety of content covered in the instruction of mindfulness and laid the groundwork to deepen the teaching practices in the following rounds.

Round Two

Through the process of round two, participants chose which standards, methods, assessments, and teacher characteristics were important to keep and were not important to keep. This process provided them the opportunity to officially drop items from the data or make sure important items remained. In this round, two standards were dropped due to a lack of consensus. All of the items in the emotions category were dropped except for compassion skills. This item was moved to the mindfulness techniques and practices category because increased compassion has been found to be an outcome of practicing mindfulness, thus, learning compassion skills could be considered another way to achieve mindfulness. This further illustrates the importance of the practice of mindfulness and how it can be achieved through multiple methods.

56

An interesting result of round two was that science and research along with the teaching category was dropped completely due to a lack of consensus from the experts. While, it is important to know that mindfulness is backed by science and research, it appears the experts do not feel that learning about this literature will aid the student in learning mindfulness. Moreover, learning to teach mindfulness was not thought to be important possibly because mindfulness is only truly learned through experience and practice. The teacher can only teach the student mindfulness through holding space for the student to find their own experience of mindfulness and by the instructor sharing their own experience of mindfulness. Therefore, learning the science of mindfulness and learning how to teach mindfulness were thought to be unimportant by the experts.

The data yielded a large amount of items concerning methods used to teach mindfulness. In round two the data decreased, however the practice method (A) continued to have a large set of items. In comparison, the assignment method decreased to include only one remaining item. This continues the theme of this discussion section that practice of mindfulness appears to be imperative. In fact, the only reason the practice methods category decreased in items was due to repetition. The experts felt that some of the items in this category were repetitive for example, formal/informal meditation techniques were better described as sitting meditation, walking meditation, and so on.

Last, teacher characteristics item decreased in round two. The item "use grounded tone and affect" was dropped due to a lack of consensus. It is hypothesized that if the teacher embodies the other characteristics that received high consensus such as non-judgment or reflection on state of self and students then maintaining an

appropriate tone or affect will come as a result. Basically, having an appropriate tone or affect alone will not aid the student in learning mindfulness. Furthermore, there was a high consensus in regard to teachers needing to have training in mindfulness from experts, ability to apply non-judgment to self and students, and to have a personal practice of mindfulness.

Round Three

Round Three worked to finalize consensus and tidy up the category items. The experts were provided the opportunity to drop, add, or edit any items or categories. The experts did not want to drop any of the items or categories because they felt they were all equally important. In fact, there was very little variability between the rankings for each item. The only changes the experts made in this finalization stage were to merge some of the remaining repetitive items. The confirmation of the categories and/or items was made after three rounds of data collection, the participants came to consensus around standards, methods, assessments, and teacher characteristics for teaching mindfulness in graduate programs. The table below is meant to be a quick reference of the remaining categories and items.

Table 13

Quick Reference

Quick Reference Standards, Methods, Assessment, and Teacher Characteristics For Teaching Mindfulness in Graduate Programs

Teacher Characteristics recommended to teach a graduate course in mindfulness are listed below.
  ■ Maintain a current personal practice of mindfulness that includes meditation practice
  ■ Training in mindfulness from experts

Table 13 continued

Quick Reference Standards, Methods, Assessment, and Teacher Characteristics For Teaching Mindfulness in Graduate Programs		
▪ Maintains a practice of reflecting on their own internal state ▪ Applies non-judgmental attitude to self and students ▪ Present moment awareness and use of bringing self and class to present moment regularly ▪ Maintain a commitment to critical thinking Awareness of contextual issues in the class room		
Mindfulness Techniques and Practice • Basic meditation practices • Informal meditation practices • Demonstration of these practices • Compassion • Sitting meditation • Loving Kindness meditation • Walking meditation • Movement meditation **Attention** • Components of attention **Dimensions of** **Mindfulness** • Definition of mindfulness • Multicultural importance within mindfulness	**Practice** • Practice, practice, practice • Meditation • Experiential practice inside class and outside of class • Attention to breath • Mindful movement • Yoga • Creating a community to foster practice after class • Sitting meditation **Lecture** • Theories of mindfulness • Explanation of practice • Difference between thinking and awareness • How the mind works within mindfulness practice (attention center, language center, automatic vs controlled thinking, affect priming)	**Formal** • A course evaluation • Teacher evaluation • Student papers **Informal** • Reflection papers • Class discussion

Table 13 continued

Quick Reference Standards, Methods, Assessment, and Teacher Characteristics For Teaching Mindfulness in Graduate Programs		
Cognitions and Physiology • the relationship between mindfulness and physiological processes • the relationship between mindfulness and cognitive processes	**Discussion** • Start discussions on how to apply mindfulness in daily life • Mindfulness practice experiences • Theories of mindfulness • Reading assignments • Students will share experience in groups • Their thoughts on mindfulness practice and experiences • **Assignments** • Students will complete assigned readings	

Note: This table provides the final results of the Delphi study. It simply lists all of the standards, methods, and assessments side by side for quick reference. It lists the teacher characteristics at the top of the table.

It should be noted that no prior research has been completed concerning

teaching mindfulness in graduate programs that train future mental health providers.

Because there is no prior research, a link between the findings of this study with

previous studies can be made in regard to teaching mindfulness in graduate programs.

However, the following paragraphs attempt to link some of the findings with relevant research in order to better understand the possible implications and meaning behind the results of this study.

Standards

Practice was the largest standard within the standards category further providing information in the importance of practice within mindfulness. This is illustrated through out all of the literature (Chopra et al., at press; Kabat-Zinn, 1990; Chambers, Lo, and Allen, 2008; Ralph Tyler, 1949). In fact, Kabat-Zinn (2003), declared the importance for mindfulness to not become a catchall behavioral term as it is implemented into the field of psychology. Having practice as an important standard to uphold while teaching mindfulness may help attain the goal that Kabat-Zinn proposed.

The emotions standard was removed from the standards category during round two due to a lack of consensus in the items contained in the emotions standard. The only remaining item within this standard was compassion skills. After careful thought this item was moved into the practice standard, with the thought that the practice of compassion is considered a technique of mindfulness and not solely a manner to obtain emotional expression. Also, while mindfulness can be defined as a method to help regulate emotion (Linehan, 1993; Germer, Siegel, & Fulton, 2005). However, it is clear in the literature that emotion regulation, expression, or awareness cannot be achieved without extensive practice of mindfulness techniques, which continues to promote the importance of practice.

Additionally, the research and science categories were removed due to a lack of consensus from the experts. For those individuals who adhere to the American

Psychological Association (APA) guidelines, this finding could be viewed as going directly against APA recommendations. However, this study was to understand the best teaching practices for mindfulness and was widely agreed upon by the experts that mindfulness cannot be understood strictly by reading about it. While maintaining and cultivating rigorous research and science concerning mindfulness is important for the field of psychology, it is not considered important in learning the practice of mindfulness. This is not to forget that, while not explicitly stated, the cognitions and physiology standard could be utilized to house much of the literature and science components of the course. This standard could be used to understand the physiological and cognitive processes used and needed in mindfulness, it would be difficult to teach this information without understanding science and research. With that said, this standard was originally brought to light by the experts and it is possible through further examination of the standards provided in this research that the importance of research and science may be more explicitly addressed.

Teaching was removed as a standards category. This could be understood by looking at the teacher characteristics category. The teacher characteristics category does not mention needing to have taught mindfulness or have taken a class in teaching mindfulness, but it does stress the importance of having a personal practice of mindfulness and having learned mindfulness from experts in the field. This could possibly explain why teaching mindfulness was not considered an important standard to maintain. This is consistent with the literature around mindfulness (Germer, Siegel, & Fulton, 2005; Chopra at al., in press).

62

Methods

The practice type within the methods category had the largest amount of items for any of the categories within the study. The experts found that sharing or discussing experiences related to the practice is an important method of learning about mindfulness. The high importance placed on practice aligns with Good and Brophy's (2007), findings about the importance of using practice and repetition of a skill in order to promote increased critical thinking and low error rates. This further illustrates the effectiveness of using an experiential course to teach the concept of mindfulness (Nieto & Bode, 2012).

It was interesting that all of the items within the assignments type of methods were dropped except for assigned reading. The experts did not want point to specific readings, in fact, the one book recommended by one expert was not held by consensus. This leaves it open to the specific instructor to decide what readings are relevant. Moreover, journaling did not reach consensus by the experts, which is opposite of McCollum and Gehart (2010), found to be effective in their study of mindfulness. Although, it does not go against the recommendations made by Bloom (1956) in regard to effective methodology for teachers.

Teacher Characteristics

Evertson and Emmer (2012), discuss the importance of attention and awareness as key tools to being an effective teacher. Moreover, non-judgment is an important characteristic for student engagement (Evertson and Emmer, 2012; Kuh Kinzie, Smith & Whitt, 2005). These characteristics were also found to be important by the experts for teaching mindfulness. However, because of the lack of consensus appropriate affect

and tone were dropped. This is interesting because Kuh, Kinzie, Smith & Whitt (2005) report that a teacher's enthusiasm is of upmost importance in promoting student engagement as well as achievement. Teacher enthusiasm can be expressed through vocal inflection, gesture, eye contact, and animation. It is possible that the appropriate affect and tone were thought to be inherent in a person who practices mindfulness and/or that tone and affect alone are not enough to teach mindfulness (meaning that if a person utilizes proper tone and affect does not mean they practice mindfulness).

Assessments

As stated above, this study is the first to examine teaching practices for mindfulness in graduate programs training future mental health providers. This is possibly the reason for the assessment category lack of creative or novel assessment criteria. However, in reviewing the literature about classroom assessment, it appears that their may be unobtrusive assessments conducted through the discussions and presentations even though this was not mentioned by the experts in this study. Unobtrusive assessments are methods of assessment in which the learner is unaware of being assessed (Marzano, 2010)

Keeping all of the discussion and literature in mind, the researcher developed a proposed model for teaching mindfulness in graduate programs that train future mental health providers.

Proposed Model

Reflecting on the results yielded from the data and the literature on effective teaching, a model for teaching mindfulness in graduate programs was developed. The literature above states that it is important to have multiple methods of assessment and

teaching in order to effectively reach different types of learners. For this reason, all of the assessment strategies will be utilized throughout the model. Moreover, the model proposes multiple methods for achieving each standard. Teacher characteristics were considered imperative to have in place before initiating instruction. The proposed model illustrates this by placing the teacher characteristics first in the model. If the instructor does not meet these criteria then the standards, methods, and assessments will not be as effective and maybe even ineffective based on the expert feedback and literature in both education and mindfulness. The next consideration that was made in developing the proposed model, in order to learn mindfulness techniques, practice is a necessity. For this reason, the practice methods have been placed with the Mindfulness Techniques and Practice standard. Additionally, the discussion method will be used within this standard because some of the items used to define the methodology specifically states discussion or sharing of practice oriented activities. This is the rational for placing the discussion method with the mindfulness techniques and practice standard. The Attention standard was linked with lecture, practice, and assignment methods. The Dimensions of Mindfulness standard is in place to ensure the students learn the important definitions and terms related to mindfulness and to explore the multicultural teachings of mindfulness. In order to reach this standard it will be important to use the lecture, assignments, and discussion methods. Last, the Cognitions and Physiology standard could be achieved by utilizing lecture, practice, and assignment methods.

Table 14

Proposed Model

<table>
<tr>
<td colspan="2">
Proposed Model
Standards, Methods, Assessment, and Teacher Characteristics
For Teaching Mindfulness in Graduate Programs

Teacher Characteristics recommended to teach a graduate course in mindfulness are listed below.

Maintain a current personal practice of mindfulness that includes meditation practice
Training in mindfulness from experts
Maintains a practice of reflecting on their own internal state
Applies non-judgmental attitude to self and students
Present moment awareness and use of bringing self and class to present moment regularly

</td>
</tr>
<tr>
<td>STANDARD</td>
<td>METHOD</td>
</tr>
<tr>
<td>Mindfulness Techniques and Practice
In order to achieve this standard the learner will be expected to practice multiple techniques of mindfulness practice. This could include compassion skills, meditation, yoga, and many other mindfulness practices.</td>
<td>Discussion
This method will include discussion based on experiential experiences, readings, and understanding of mindfulness theory.

Practice
This method will employ multiple types of mindfulness practice inside and outside of class time.</td>
</tr>
<tr>
<td>Attention
In order to achieve this standard the learner will be expected to learn the components of attention.</td>
<td>Practice
This method will employ multiple types of mindfulness practice inside and outside of class time.

Lecture
This method will employ lecture on topics such as mindfulness theory and practice, difference between thinking and awareness, and how the mind works within mindfulness practice.</td>
</tr>
</table>

Table 14 continued

STANDARD	METHOD
Dimensions of Mindfulness In order to achieve this standard the learner will be expected to demonstrate understanding of mindfulness definitions and terms as well as understand the multicultural aspects of mindfulness.	**Assignments** This method will involve the learner completing specific reading assignments relevant to the topic. **Discussion** This method will include discussion based on experiential experiences, readings, and understanding of mindfulness theory. **Lecture** This method will employ lecture on topics such as mindfulness theory and practice, difference between thinking and awareness, and how the mind works within mindfulness practice. **Assignments** This method will involve the learner completing specific reading assignments relevant to the topic
Cognitions and Physiology In order to achieve this standard the learner will be expected to demonstrate awareness around the relationship between mindfulness, physiological processes, and cognitive processes	**Lecture** This method will employ lecture on topics such as mindfulness theory and practice, difference between thinking and awareness, and how the mind works within mindfulness practice. **Assignments** This method will involve the learner completing specific reading assignments relevant to the topic **Practice** This method will employ multiple types of mindfulness practice inside and outside of class time.

Table 14 continued

Assessments

These assessments will be used to assess student learning throughout the course and at the end of the course. They will include formal and informal assessment such as:
 	
    • A course evaluation
    • Teacher evaluation
    • Student papers
    • Reflection papers
    • Class discussion

Note: The above table illustrates a proposed model to use when teaching mindfulness. It provides specific standards paired with specific methods. The model also contains assessments to use in assessing student learning and teacher characteristics needed to teach a course in mindfulness.

Implications for Training

This study provides a vehicle for training programs to measure standards and practices of their curriculum in mindfulness. The purpose of the study was to provide a base for future research to be able to study a structure for graduate programs to teach mindfulness to ensure quality of training or best practices not only for the training program, but also for the future of mindfulness in psychology. This study not only provides important key areas to be taught in regard to mindfulness, but also includes important teacher characteristics needed to teach these courses around the nation. This will hopefully keep mindfulness from becoming just another behavioral tool in a mindless mental health provider's toolbox. In regard to the vast amount of research that is arising in regard to health benefits for clients and providers, learning mindfulness while in graduate school can possibly aid in a number of health benefits for the therapist. Moreover, this could aid in the proper teaching of mindfulness to clients, which could impact their mental and physical health.

Future Directions

Future research could test the efficacy of the curriculum identified in the study. With further input from the experts in the field, each item found within the five categories could be further defined and/or elaborated on to further standardize the curriculum. In addition, future research could address the concerns brought forth in the limitations section. Moreover, it could be beneficial to complete student outcome measures once the curriculum as been implemented in a graduate training program. The standardization of a curriculum could also aid in future research involving client outcome measures, student burn out, therapist burn out, and many other studies that rely on a standardized method of instruction.

Limitations

The first limitation is in regard to using the Delphi method. This method assumes that all the experts have the same level of expertise, which may not be accurate. In addition, it is unknown if the experts adhere to the teacher characteristics that were established in this study. Having this information could be beneficial to better understand the expert's bias areas. Moreover, as in any qualitative study, the research holds a bias regarding mindfulness as a practice, which could have possibly influenced the researchers perception of the narrative results.

Currently in the field of mindfulness there is debate over the definition of mindfulness and meditation. Due to the constraints of the study, no formal definition of either term was referenced. This could have caused confusion for the experts or impacted some of the ranking results. Another area of confusion may have been that the study asked the experts to provide their teaching practices when teaching mindfulness

in graduate programs. However, the questions did not explicitly say whether or not that meant the action of doing mindfulness or mindfulness as a theory. It is possible that by not making this distinction that the experts could have referring to either mindfulness as a theory or the practice of mindfulness.

Strengths

This study's strengths were the participants. The participants were all notable experts in the field, which provided the study with rigor and merit. The study also reached its goal of having at least 10 participants and all but one participant completed the study to the end. This added to the depth of the study's data.

Conclusion

Mindfulness is growing in use in the field of applied psychology, and is increasingly obtaining validation of its effectiveness through empirical studies. Mindfulness has been found to be useful in depression, depression relapse, cognitive skills, attention, anxiety, and sleep (Germer et al., 2005). Furthermore, mindfulness has been found as an empirically supported treatment, useful in building a therapeutic alliance, increasing empathy, attention, and affect tolerance (Germer et al., 2005). However, there are no standardized teaching practices in regard to the instruction of mindfulness in graduate programs related to mental health. The literature states the need for effective and practical means for teaching therapists in training mindfulness (Shaprio et al., 2008; Germer et al., 2005; Kabat-Zinn, 2003; Baer 2006; Christopher, 2006; Gehart and McCollum, 2010). Moreover, education literature states the importance of having teaching standards, methods, assessments, and teacher characteristics for effective teaching. With this in mind, a Delphi study was used to

develop a model for training programs for mental health providers that would embody

the essence of mindfulness yet contain the rigor of graduate training.

APPENDICES

APPENDIX A

INTRODUCTION LETTER

Dear Dr. Expert,

I am a PhD student in Counseling Psychology at the University of North Dakota and I am working on a dissertation titled "The Instruction of Mindfulness: Incorporating Mindfulness into the Training of Mental Health Providers." The study is designed to identify standards that are used in curriculum for teaching mindfulness.

You have been identified as having an expertise in teaching some aspect of mindfulness. I would like to invite you to participate in my study. I am using a Delphi Method. This method consists of a series of waves of data collection. These waves are utilized to identify consensus among the group of experts who teach some aspect of mindfulness in a classroom.

I will be interested in gathering your responses in the following areas: 1) Real and ideal instructional competencies and standards for your course. 2) Real and ideal effective teaching methods used for your course. 3) Real and Ideal methods of assessment to use when assessing effectiveness.

You may simply click the link below and you will find the consent form and the first wave questions or, in case I do not hear back from you within two weeks, I will follow up with a letter that includes, a consent form, first wave questions, and self addressed stamped envelope. If you have any additional questions please feel free to contact me via email crystal.rofkahr@gmail.com or phone at 701-213-7513.

Also, if you want to nominate a colleague who you think would be a beneficial expert in this field, I encourage you to provide any name and contact information you feel comfortable sharing. Thank you and I look forward to your participation.

Warmly,

Crystal Rofkahr, MA

APPENDIX B

ROUND 1 QUESTIONS

1. What **instructional competencies or standards** do you **actually** include when teaching mindfulness?

2. What **instructional competencies or standards <u>should ideally </u>**be included when teaching mindfulness course?

3. As an instructor what **methods** do you **actually use** that are most effective in teaching mindfulness practice?

4. As an instructor what are the most effective **methods** that you think **<u>should ideally </u>**be used in teaching mindfulness practice?

5. What **methods of assessment** do you **actually** use to assess the effectiveness of teaching mindfulness practice?

6. What **methods of assessment should ideally** be utilized to assess the effectiveness of teaching mindfulness practice?

APPENDIX C

ROUND 2 QUESTIONS

1. Please look at the STANDARDS provided by the first wave of data. Please decide if the standard is important to include or if it is not important to include. Then, click and drag to the appropriate box.
2. Please look at the *STANDARDS* provided by the first wave of data. Please decide if the standard is important to include or if it is *not* important to include.
3. Addition standards you think are important to include or any additional comments or questions?
4. Please look at the *Methods (Practices)* provided by the first wave of data. Please decide if the method is important to include or if it is *not* important to include.
5. Please look at the *Methods (lecture)* provided by the first wave of data. Please decide if the method is important to include or if it is *not* important to include.
6. Please look at the *Methods (discussion)* provided by the first wave of data. Please decide if the method is important to include or if it is *not* important to include.
7. Please look at the *Methods (sharing)* provided by the first wave of data. Please decide if the method is important to include or if it is *not* important to include.
8. Please look at the *Methods (assignment)* provided by the first wave of data. Please decide if the method is important to include or if it is *not* important to include.
9. Addition methods you think are important to include or any additional comments or questions?
10. Please look at the *Assessment* provided by the first wave of data. Please decide if the assessment is important to include or if it is *not* important to include.
11. Addition assessments you think are important to include or any additional comments or questions?
12. Some miscellaneous topic appeared within the wave one data. I would like to hear your thoughts about their importance. Please decide rather it is an important topic to include or not include.

APPENDIX D

ROUND 3 QUESTIONS

1. Please rank order the following STANDARDS for teaching mindfulness.
2. Do you have any edits on the specific standards above?
3. Do you have any comments or concerns about the standards above?
4. Are there any standards you think are missing that you feel strongly about including or that you think need to be deleted?
5. Please rank order the Methods (lecture, sharing, discussion) of teaching mindfulness.
6. Do you have any edits on the specific methods above?
7. Do you have any comments or concerns about the methods above?
8. Are there any methods you think are missing that you feel strongly about including or that you think need to be deleted?
9. Please rank order the ASSESSMENT for teaching mindfulness
10. Do you have any edits on the specific assessments above?
11. Do you have any comments or concerns about the assessments above?
12. Are there any assessments you think are missing that you feel strongly about including or that you think need to be deleted?
13. Please rank order the following TEACHER CHARACTERISTICS for teaching mindfulness
14. Do you have any edits on the specific teacher characteristics above?
15. Do you have any comments or concerns about the teacher characteristics above?
16. Are there any teacher characteristics you think are missing that you feel strongly about including or that you think need to be deleted?

APPENDIX E

MINDFULNESS CURRICULUM

Delphi Study Results
Standards, Methods, Assessment, and Teacher Characteristics
For Teaching Mindfulness in Graduate Programs
Teacher Characteristics recommended to teach a graduate course in mindfulness are listed below.
▪ Maintain a current personal practice of mindfulness that includes meditation practice
▪ Training in mindfulness from experts
▪ Maintains a practice of reflecting on their own internal state
▪ Applies non-judgmental attitude to self and students
▪ Present moment awareness and use of bringing self and class to present moment regularly

STANDARD	METHOD	ASSESSMENT
Learn multiple methods of formal and informal meditation practice, which could include sitting meditation, standing meditation, walking meditation, movement meditation, loving kindness meditation, or relational meditation.	Experiential practice inside and outside of class Maintaining a meditation practice in multiple types of meditation listed above Lecture on the explanation of the practice (what mindfulness and meditation look like) Class discussions on the application of mindfulness in daily life Create a community outside of class that is supportive of meditation and mindfulness	Reflection Papers Participation in course discussion

STANDARD	METHOD	ASSESSMENT
Learn the art of focusing attention	Experiential practice inside and outside of class Maintaining a meditation practice in multiple types of meditation listed above Lecture on how meditation and mindfulness work within the brain	Reflection Papers Participation in course discussion Paper on mindful attention and the brain
Learn how to work with their thoughts while learning how to practice mediation	Experiential practice inside and outside of class Maintaining a meditation practice in multiple types of meditation listed above Sharing their experiences with the class or a small group after experiential exercise's	Participation in class discussion Reflection paper
Learn about compassion	Sharing their experiences with the class or a small group after experiential exercise's Class discussions on the application of mindfulness in daily life Experiential practice inside and outside of class Maintaining a meditation practice in multiple types of meditation listed above	Reflection Papers Participation in course discussions

STANDARD	METHOD	ASSESSMENT
Learn how to explain mindfulness techniques to others	Practice leading mindfulness practice	Teacher evaluation
Learn about the cognitive and physiological process involved in mindfulness	Lecture on how meditation and mindfulness work within the brain Lecture on Mindfulness theories Discussions on required course readings	Paper on topic area Participation in course discussion
Learn about multicultural aspects of mindfulness	Discussions on required course readings	Paper on topic area Participation in course discussion

APPENDIX F

INFORMED CONSENT

TITLE: Instruction of Mindfulness in Graduate Programs:
                                Training Future Mental Health Providers

PROJECT DIRECTOR: Crystal Rofkahr, M.A.

PHONE #:   701-213-7513

DEPARTMENT: Counseling Psychology and Community Services

STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate. If you have questions at any time, please ask.

WHAT IS THE PURPOSE OF THIS STUDY?

You are invited to participate in a study that will attempt to determine how to teach mindfulness within graduate programs that train mental health providers. You have been selected for this study because you are an expert in the field of teaching mindfulness in mental health. If you are under 18 years of age, please do not proceed with the rest of this study.

The purpose of the study is to determine some standards and competencies in teaching mindfulness in graduate programs responsible for training mental health providers.

HOW MANY PEOPLE WILL PARTICIPATE?

Approximately 20-30 mental health providers will take part in this online study around the country.

HOW LONG WILL I BE IN THIS STUDY?

As an expert you will be asked to complete at least three rounds of survey's regarding the instruction of mindfulness. No risks are expected to result from participation in this study.

WHAT WILL HAPPEN DURING THIS STUDY?

The methodology of the study will be the Delphi method. This method will be used to come to a consensus about the best practices in teaching mindfulness within Counseling Psychology programs. During this study, you will be asked to answer three broad questions about the instruction of mindfulness. You will then be asked to rank order the responses from the first three broad questions received from all participants. This process will continue until consensus is has been reached.

WHAT ARE THE RISKS OF THE STUDY?

There are no foreseeable risks to participating in this study.

WHAT ARE THE BENEFITS OF THIS STUDY?

While there is no direct benefit to you from your participation, your involvement will help us understand and establish rigorous standards and competencies for instructing mental health providers in mindfulness. We can then use this information to better prepare our future mental health workers in the approach of mindfulness and meditation.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any costs for being in this research study.

WILL I BE PAID FOR PARTICIPATING?

You will not be paid for being in this research study.

WHO IS FUNDING THE STUDY?

The University of North Dakota and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

CONFIDENTIALITY

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. Your study

record may be reviewed by Government agencies, the UND Research Development and Compliance office, and the University of North Dakota Institutional Review Board.

All information collected will be kept private between researchers and participants. Identifying information will be asked for and used by the researcher. Information you provide will be de-identified before it is sent out for review by other participants. In any report about this study that might be published, you will not be identified. Your participation in this study is on a voluntary basis. If at any time you decide not to participate, there will not be a penalty of any kind.

The data will be stored on a secure server until it is analyzed at the Department of Counseling Psychology and Community Services at UND. After data entry, and a period of at least three years, the electronic data will be deleted. Only the researchers and Institutional Review Board auditors (who make sure the research participants are treated fairly) will have access to this data. Results will be reported in group form only. Please print a copy of this consent form for your records.

CONTACTS AND QUESTIONS?

This study is conducted by Crystal Rofkahr, MA and Dorlene Walker, PhD, at UND Department of Counseling Psychology and Community Services. Any questions or concerns about the study may be directed to Crystal Rofkahr, MA via email crystal.rofkahr@gmail.com or phone (701) 213-7513 or Dr. Walker at (701) 777-3737. If you have questions regarding your rights as a research subject, or if you have any concerns about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or if you wish to talk with someone else.

Please print a copy of this consent form for your records.

By providing your electronic signature below, you indicate that this research study has been explained to you, that your questions have been answered, and that you agree to take part in this study and to all of the above information.

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