ORIGINAL PAPER

Impact of Mindfulness Training on Counseling Students' Perceptions of Stress

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Abstract Research continues to document the positive effects of mindfulness on physical and mental health. Mindfulness is beginning to be incorporated into the professional training of mental health practitioners; however, documentation of the effects of mindfulness training on trainees is still needed. This article uses qualitative research to explore whether a mindfulness class based on Kabat-Zinn's Mindfulness-Based Stress Reduction program may be a promising prophylactic for the stress that causes burnout among mental health workers. Forty-one students participated in this research study. Participants indicated that mindfulness increased (a) present-moment orientation and (b) increased their awareness and acceptance of feeling states and bodily states related to stress. Participants described that through this acceptance and awareness, they increased their ability to preempt stress, increased their confidence in ameliorating stress, and increased self-compassion. Students also indicated greater confidence regarding their ability to prevent burnout and their future as mental health workers.

Keywords Mindfulness-based stress reduction · Burnout · Compassion fatigue · Training · Counseling · Mind–body medicine

Introduction

Compassion fatigue, vicarious traumatization, and burnout are well-researched phenomena that have been described and investigated increasingly over the last 20 years (Baker 2003; Kahill 1988; Maslach and Jackson 1984; McCann and Pearlman 1990; Vredenburgh et al. 1999). Nascent and seasoned mental health professionals must acknowledge these phenomena

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because mental health professionals have demonstrated higher levels of burnout than primary health care workers (Imai et al. 2004). Figley (1995) defined "secondary traumatic stress" as "resulting from helping or wanting to help a traumatized or suffering person" (p. 7) and suggested that empathic engagement, one of the key components of successful therapy, is the primary conduit for the transmission of traumatic stress from client to therapist (1995, 2002).

Numerous studies of mental health workers (Craig and Sprang 2010) show that the stress associated with therapeutic encounters is an "expected by-product of the work" (p. 319). Craig and Sprang (2010) pointed to the expanding, nationwide shortage of community-based mental health providers as an imperative that clinicians find ways to prevent this stress-induced burnout. This imperative could also apply to educators of future therapists to give students the necessary tools to manage the inherent stress of practicing in this field.

Craig and Sprang (2010) noted that some variables have been found to buffer the development of compassion fatigue and include access to clinical supervision (Rich 1997), training for new and experienced clinicians (Chrestman 1999), perceived coping ability (Follette et al. 1994), emotional separation (Badger et al. 2008), self-care strategies, and social support (Chrestman 1999; Rich 1997; Schauben and Frazier 1995). Yet, many training programs in the field have not developed curricula that would address these variables.

A considerable amount of research touts the benefits of applying mindfulness approaches in psychotherapy and behavioral medicine (e.g., Baer 2003; Bishop 2002; Bonadonna 2003; Grossman et al. 2004), but research exploring the effects of mindfulness on psychotherapists themselves has been lacking until recently. In a recent paper aimed at reviewing the empirical support for mindfulness, Davis and Hayes (2011) concluded that "given that the therapeutic relationship is emotionally intimate, potentially conflictual, and inherently interpersonal, therapists' trait mindfulness may aid their ability to cultivate and sustain successful relationship with clients"

(p. 201). While there have been studies that suggest mindfulness is likely to improve one's counseling skills (Brown and Ryan 2003; Neff 2003b; Thomson 2000; Tremlow 2001), little attention has been given to the issue of keeping therapists healthy and less prone to burnout.

Researchers have shown mindfulness training to be correlated with improved mental health in several high-stress career populations. Jha et al. (2010) examined the emotional experience among a military group in a highly stressful pre-deployment period. Increased working memory and self-reported positive affect suggested that mindfulness meditation might promote emotion regulation during periods of stress. Premedical and medical students reported less anxiety and depression symptoms after mindfulness-based stress reduction (MBSR) training compared to a waiting list control group (Shapiro et al. 1998).

Some research shows that mindfulness may be a promising prophylactic for the stress that causes burnout among mental health workers. Counselor trainees exposed to interpersonal mindfulness training demonstrated that meditation fostered emotional intelligence and social connectedness, as well as reduced stress and anxiety (Cohen and Miller 2009). Shapiro et al. (2007) conducted a quantitative study in which trainees in counseling or psychotherapy were taught mindfulness-based stress reduction techniques; these students reported significant decreases in stress, negative affect, rumination, and anxiety, and increases in positive affect and self-compassion.

More documentation of the effects of mindfulness training on counseling students is needed in order to bring about policy or curriculum changes that would make mindfulness a necessary specific competency (Davis and Hayes 2011). A clearer understanding of how mindfulness training affects stress would indicate the viability of such training as a prophylactic for stress-induced burnout among psychotherapists. We explored shifts in counseling students' perceptions of stress over a 15-week mindfulness course, specifically, how the course affected students' perceptions of stress and potentially diminishes burnout.

Method

Participants

Participants were master's-level graduate students in mental health counseling, school counseling, and marriage and family counseling enrolled in a course titled Mind–Body Medicine and the Art of Self-Care. Three sets of students from three consecutive class years were included in the inquiry. Data were collected from a total of 41 students, predominantly female (38 females and 3 males), ranging in age from the mid-20s to mid-50s. Participation in the study was optional at both pre- and post-semester survey times, with 28 students responding pre-semester and 41 responding post-semester.

Almost all students were involved in their first practica while taking the mindfulness course; therefore, their shifting perceptions of stress and burnout coincided with greater exposure to clinical work.

Course Description

The 15-week, three-credit course was titled Mind–Body Medicine and the Art of Self-Care. The class was loosely based on Kabat-Zinn's Mindfulness-Based Stress Reduction 8-week program. The aim of the course was to teach self-care practices through mindfulness training while providing education about meditative and contemplative disciplines relevant to psychotherapy and behavioral medicine. The course instructor was a core faculty member in a Council for Accreditation of Counseling and Related Educational Programs accredited graduate program and also a certified yoga teacher who had practiced yoga and meditation for over 25 years.

Course requirements included 75-min in-class mindfulness practices two times a week, including hatha yoga, sitting meditation, conscious relaxation techniques, and qigong. In addition, the students were required to practice some form of mindfulness outside of class for 45 min, four times a week. Compliance was indicated by journaling 6 days a week, post practice. The course also included readings and research investigations on empirical studies of the effects of mindfulness practices. Students received grades for attendance, participation, journal writing, and research presentations.

Procedure

The students were surveyed pre- and post-semester with five open-ended questions (see Appendix) designed to explore the following: (a) the impact of stress on counseling students, (b) counseling students' self-assessments of their ability to manage stress, (c) what counseling students' current efforts were to manage stress, (d) the impact of stress on their practices of counseling, and (e) counseling students' concerns about burnout (Christopher and Maris 2010; Schure et al. 2008). The University's Institutional Review Board approved the study.

The instructor requested that students address the research questions in journal format. The students were invited to turn in their written responses from pre- and post-semester and reminded that their participation was voluntary, anonymous, and would not affect their grade (as they self-graded). Participants received no direction on length or quality of responses.

Analysis

This study used conventional content analysis (Hsieh and Shannon 2005; Patton, 1987; Strauss and Corbin 1998). By

focusing on meanings, themes, and patterns that may be manifest or latent in interview data, content analysis goes beyond merely counting words or extracting objective contents from texts or interviews. All three of the authors were involved in data analysis. Standard steps of content analysis were followed, from preparing the data to writing up the report, as described below. Content analysis was implemented by reading the responses and deciding on themes and labels for the phenomenon identified. Themes are units of meaning that can be expressed as a single word, a phrase, a sentence, a paragraph, or an entire interview. Researchers coded data at the word and phrase level to capture individual themes. The responses were analyzed inductively, meaning, the themes emerged from the data instead of being decided a priori (Patton 1987).

Initially, cross-case analysis was conducted, in which responses from each question were analyzed across the case or individual (Huberman and Miles 1994). To establish trustworthiness, 6 (three pre and three post) of the 69 transcribed interviews were selected at random, read, and coded by all three analysts to establish a preliminary and tentative set of themes and sub-themes. Redundancies and semantic equivalencies were eliminated through consensus. The researchers began clustering codes into larger groups, capturing sub-categories of concepts described by the participants. These sub-categories were then ordered and linked to one another to delineate even broader categories addressed by the participants. This process was repeated until meta-categories were established that could not be further described without compromising the common denominator of any one code in the category. Throughout this iterative process, the researchers identified quotes to exemplify the findings.

The remaining 63 interviews were divided between the two of the three authors for independent analysis. These authors convened for a series of meetings to discuss the results of their separate coding and to establish intersubjective criteria for coding. Interviews were coded using the constant comparative method (Glaser and Strauss 1967), which entails ongoing comparison of new instances of a theme with those already coded under that theme. In each phase of the analysis, both researchers compared and contrasted their analysis and refined the codes, categories, and sub-categories determined in the analysis. Because of the relatively small amount of data being analyzed and the limited number of data analysts, consensus was achieved at each step of the data analysis, ensuring trustworthiness. In the three instances, where a consensus was not reached, the third author was consulted, and the majority view adopted. It was not seen as necessary to document percentage of interrater reliability. Finally, in writing up the findings, the researchers organized the data by theme rather than by question as the content generated by the participants typically spanned multiple questions.

Results

Stress in Students' Personal Lives

At the beginning of the semester, the students' narrative responses largely fell into the following themes: (a) causes and (b) manifestations of stress in their lives.

Beginning of Semester

Causes The students most often cited time, including time management, time constraints, and lack of free time as contributors to stress. For instance, one student wrote about lack of time and her time management skills in this way: "I do feel that I am not great at stress management right now, especially… where I am pressed for time. These moments would most likely be avoided if I did not procrastinate." Another student discussed lack of free time as a factor of stress in her life and wrote, "I have to be really careful not to take one too many shifts at work, which cut into my personal time… I must, must, must have quality time to myself daily, away from people and hustle and bustle, or I feel trapped and anxious."

Participants often discussed unhealthy eating habits and lack of exercise as influencing stress. "When I am exercising regularly and eating right, my days go by so much smoother. On the other hand, if I'm not working out and eating crappy convenient food, I feel stressed." Other causative factors of stress mentioned by students were academic performance and institutional demands. One student stated,

> "I am never content to just live in the moment and am always focusing on the next thing on my never-ending list of tasks that need to be done. I stress myself out about everything from getting to school on time to whether or not my skills as a counselor are satisfactory."

Finally, lack of sleep was factored in as a contributor to stress in participants lives: "I know I don't get enough sleep and changing that would probably help my stress level considerably but that's not really a possibility right now."

Manifestations Manifestations of stress that students identified included the ways in which stress manifests itself in their (a) physical, (b) interpersonal, (c) cognitive, and (d) emotional lives.

1) Physical. Participants described the physical manifestations of stress and anxiety in their lives describing body pain, headaches, illness, fatigue, and ulcers. One student wrote, "although I try to manage it, it isn't unusual for me to… experience chest pain during finals or some major life event. I frequently feel like I can't get enough oxygen in my lungs." Others described a lowered immune system and illness: "I get sick – really sick sometimes – and now,

as a result, [I] seem to get stressed about being stressed and hoping not to get sick." Participants also discussed headaches and backaches. One student wrote, "sometimes I get headaches that I am sure are connected to my stress levels. I can feel my neck and back start to get tight…when I get too stressed out." One student reported ulcers, "Recently I have been experiencing severe pain in my stomach when my anxiety begins to increase and it starts feeling much like my stomach did when I had ulcers a few years ago." Fatigue was acknowledged by some of the students as a result of stress. One student wrote, "I experience stress as a feeling of intense fatigue. I feel like I don't have the energy to even talk, and have a general sense of 'I just don't care.'"

2) Cognitive/Emotional. Participants wrote about the effect of stress on cognitive and emotional aspects of the mind. When discussing the difficulty of staying focused on the present task, one student journaled,

"I tend to have constant anxiety about things in every aspect of my life and I am always anticipating that something negative is going to happen. I am never content to just live in the moment and am always focusing on the next thing on my never-ending list of task."

Another described the effect stress has on decision making, writing,

"I think stress has seeped into many areas of my life. Its presence is so pervasive I hardly notice that many of my actions are responses to stress instead of an action or response that I would choose if I were calm and centered. Unfortunately I think that stress drives me… creating ingrained patterns of being that are frequently not healthy."

Several students discussed difficulties sleeping when stressed or anxious because they were unable to quiet their minds. One student wrote,

"Sometimes I am unable to sleep because my mind is still working and then I worry about the fact that I am not sleeping, which makes it worse… Sometimes, my mind wakes me at the exact same time every night for several nights in a row."

3) Interpersonal. Respondents discussed manifestations of stress in interpersonal relationships with friends, co-workers, and family, at times expressing their frustration with their behaviors towards others:

"When I feel that I am over drawn and cannot handle my stress levels I get irritable, less patient, and more easily annoyed. I notice this most with the one I care for the most. It seems that when I stress I take it out more easily on my wife than on my clients or anyone else. This does

not happen often, but when it does happen it makes me feel even worse and it really makes me want to do something about my stress levels."

This student noted her irritability, writing, "I get bothered if the house is messy or if I feel like I'm doing more housework than my boyfriend. Then I wonder when I started to care about cleanliness or cooking healthy meals and budgeting." Another student journaled,

"I just had a friend comment on my levels of stress this past weekend and it was such a wake-up call to me, because I thought my stress only affected me and was my problem and not visible…it kind of shook me up a little and I instantly became defensive with her and was aware that I felt like a failure at handling my stress."

End of Semester

Thematically, two major categories emerged at the end of the course: (a) awareness and (b) acceptance.

Awareness Three main sub-themes emerged with regard to awareness (i.e., to have knowledge or be conscious of). These were (a) staying present, (b) increased consciousness of stress, and (c) awareness of bodily states.

1) Staying Present. Many participants wrote about their ability to stay present (i.e., consciously staying with whatever each new moment offers). Students discussed the effect this practice had on their stress levels.

"I definitely feel like I benefited a lot from this class. The first change that I noticed after a couple of meetings was that I became more mindful. I started living more in the present and enjoying minute-to-minute experience," wrote one student. Another noted, "I have become better at letting go and really focusing on what can be done in the present moment to accomplish what I need to accomplish."

When describing her experience of moment-by-moment mindfulness this student detailed cognitive restructuring,

"I am by nature a worrier and a ruminator. I find it helpful to be able to say to myself now, 'I'm not going to think about that, I am going to look at the scenery while I am driving, or focus on my breathing', or something along these lines. It is a tremendous relief to feel this way. Somehow it relieves me of the guilt… the feeling that I should always be thinking about solving my problems or other people's problems."

2) Increased Consciousness of Stress. Students reported an increased consciousness of stress and anxiety as another

shift in their changing awareness. Participants reported the ability to anticipate stress with this awareness: "What I noticed this semester is that I am catching myself before stress overwhelms me. I can see the red flags and can do something about it before things spiral out of control." Other students described developing the ability to gauge the amount of stress they were experiencing and to notice when levels were becoming critical:

"I felt in the past that I had managed stress really well. However, after completing several meditation [sessions], and realizing that being stressed and overwhelmed were common during my practices, it seems I might not have managed as well as I was portraying. I feel my awareness of my level of stress has helped me to reduce the stress before it becomes overwhelming."

Another student described becoming aware of the way stress cycles for her. She wrote,

"I am learning to manage stress more effectively. I am learning to be present with it, talk about it, and let it go. The letting go part is very difficult and seems to be my sticking point. I can be present with my stress, talk about it, and want to let it go, but have been unable to find a way to do that. Yoga sometimes helps in the moment, but sometimes the stress finds its way back into my mind. Awareness of this pattern has been key for me… It is the first step to developing better skills for managing my stress."

3) Awareness of Bodily States. Students claimed greater awareness of bodily states as indicators of stress,

"What I have gained from mind–body class is the ability to be aware of my body's response to stress. I notice when I have high level of stress because I am distracted, have increased anxiety in my stomach, notice tension in my neck, and have more aches and pains."

For this student, awareness of stress allowed her greater ability to identify her limits:

"I am better at reading my body's signals when they say 'This is enough!' I also feel like I am able to recognize my anxiety now without getting totally overwhelmed by it. I would not say I am anywhere close to accepting it, but it is a start."

In exploring her newfound awareness of stress, this participant described the deleterious effects that stress can have on self-concept via the body and wrote,

"I have found a deep connection and awareness to my body through this class. I found that I often hold my stress in different parts of my body, particularly my stomach… I can become so focused on my body during stress that I lose sight of my tasks ahead and focus on the negative things about my body. This is a pattern that really came to light throughout this semester. When I become stressed I hold it in my body, I then begin to criticize my body, my self esteem drops, and the stress increases. It is an ugly cycle."

Acceptance Participants discussed their ability to accept what life presents to them, including stress-inducing situations. Sub-themes of acceptance included (a) accepting difficulties, (b) greater self-forgiveness, and (c) emotional reactivity and regulation.

1) Accepting Difficulties. One participant expressed this acceptance in the following way:

"Whereas in the past it has been easy for me to get stuck worrying about something over and over, I now find it easier to accept that there are some things I have little or no control over, so they will need to work out on their own. That has helped reduce my stress a lot, I think."

Another student noted how she now views stress with acceptance instead of shame. She journaled,

"Stress is still a factor in my life, but I don't think it is as much of a problem as it used to be when I was trying to ignore and/or rise above it. I think the main difference has been that now I acknowledge and attend to my stress instead of ignoring it… I think stress will always be a part of my life especially in such an emotionally demanding profession. Now I see stress more as an indicator that I need to do something about it instead of shoving it down and hiding it."

2) Greater Self-Forgiveness. Students reported an increase of self-compassion and a decrease of self-judgment. This participant, when commenting on her skills as a clinician wrote, "I am more forgiving of my growing pains than I have been in the past", while another reflected, "I am working on not judging myself when I get overwhelmed and stressed, and instead trying to take care of myself." Reflecting on acceptance and present state awareness, another student wrote,

"I think that my previous coping strategy was to just ignore the stress; however, now I feel I am more present and aware of my stress. I notice physical sensations and can identify when I am feeling anxiety. Rather than trying to push this away or ignore it, I am able to more fully accept and honor it as part of this intense stage in my life."

3) Emotional Reactivity and Regulation. Over the course of the semester, students appear to have experienced a change in their ability to tolerate and accept difficult

thoughts and feelings, and regulate fluctuating emotional states. One student noted a change in her ability to recognize potentially disturbing thoughts, accept them as thoughts only, and let them go:

"I am concerned with burnout because I notice how people's stories seem to pop into my mind when I am not at work. I do feel that I notice the thoughts now and realize that they are just thoughts and separate them from what is happening in the moment. I feel like I am more able to let go of distressing thoughts."

This participant reported an ability to modulate emotion through her awareness of the same: "I think I'm now more aware of my initial reactions to stress and can therefore start calming down sooner." Another student described a new way of experiencing emotion, particularly greater acceptance of difficult emotional states that contribute to stress:

"Before this class I had a difficult time dealing with stress and the various underlying emotions that came with it. I would at times become so paralyzed and overwhelmed with stress that I would become depressed… Now that I am more aware of my underlying emotions, when I get stressed I am able to acknowledge the feelings, validate them for myself, and let go."

This student stated, "I am much more in touch with my emotions, I am much more comfortable with experiencing anger or sadness, allowing myself to feel them, without judgment (sometimes) and not trying to bury them deep inside me." Others addressed how witnessing and accepting the stress within their bodies releases that same stress: "It is there, we can accept it, and then from acceptance choose how we will react to it or choose not to react to it. Watch the stress rise and watch it dissipate." Explaining the value of acceptance and its impact on emotional reactivity, this student wrote,

"I think it was really helpful for me that day in practicum when everyone was feeling stressed and exhausted and I was able for the first time, to allow all the stress and exhaustion to just be. It was so helpful for me to really understand how much energy it takes to try to cover up or ignore the difficult emotions I feel. It was comforting to recognize that sinking into a difficult feeling rather than fighting it made it easier for it to pass."

Stress and Students' Clinical Practice

Open-ended questions prompted students to explore the effect stress has on their ability to be clinicians and their ideas about burnout over the course of a mindfulness/self-care course.

The themes that surfaced at the beginning of the semester included (a) the importance of maintaining a present-moment orientation, (b) burnout, and (c) hopefulness regarding stress management and burnout in the future.

At the end of the semester the themes of (a) therapeutic relationship, (b) increased awareness of stress and burnout, and (c) self-compassion were also discussed.

Beginning of Semester

Importance of Maintaining a Present-Moment Orientation At the beginning of the semester, the students described how anxiety affects their ability to maintain a present orientation with clients and connect with the client's experience. Several participants' journals echo statements such as this:

"It's definitely much harder to be present, empathetic, and genuine when I feel anxious and frustrated. When I am feeling these things, there is no room for much of anything else. I have trouble making room for my own self-care during those times, so how could I have room to care for someone else?"

Speaking about the impact being present has on empathy, which she refers to as resonance, this student wrote, "A lack of attending [to the client] will then possibly lead to a decrease in resonance with my client, making it more difficult to understand them."

The following student suggested that she may not only loose her present focus with clients but may also become irritated with the client in the process. Writing about what happens when she does not attend to her own stress, she stated that she "tend[s] to get cranky and impatient while with clients" and finds her "mind wandering." Another student explored the experience a client may have while receiving services from her and summarized how the therapeutic relationship might be impacted:

I see stress and anxiety as the biggest barriers to being present in any moment, including being present with a client. Just as my husband can tell when my mind isn't with him in a conversation, a client will be able to sense if I am not fully available for him/her. I think the most important aspect of a good therapeutic relationship is being fully present. I believe it is what gives us insight into the client's experience, enables us to be empathetic, models congruence, and ultimately fosters a positive therapeutic relationship. So, if my stress is overwhelming, I believe it will impact the root of what I believe it the most important aspect of therapy: the therapeutic relationship.

Concern About Burnout Most students endorsed concern about burnout at the beginning of the semester, many writing that they were "very concerned" about the impact it might have on their personal and professional lives. Sub-themes included: (a) burnout and personal life, (b) burnout and the

therapeutic relationship, (c) good boundaries and burnout, and (d) hopefulness.

1) Burnout and Personal Life. Many participants reflected on their fear that burnout will impact their personal lives, specifically relationships and sleep habits. One concerned student who had worked in physical therapy remembered burnout in her former career and wrote that she would "have difficulty leaving work at work" and would "wake up at night thinking about some of their very sad circumstances." In regard to "caretaking", the following participant reflected, "I have a tendency to put other's needs before mine." Another wrote that when he is stressed, his wife is "on eggshells around" him and expresses how this concerns him.

2) Burnout and the Therapeutic Relationship. Students expressed concern about burnout in their professional lives. Several students discussed how burnout might affect their ability to be present with clients. One student wrote, "I have a strong expectation that I will experience early burnout in this field. I think that is part of my fear of being in this [graduate] program… It is scary to think about how that would affect my clients." A student acknowledged that burnout could shorten their longevity in the field, "I want to be a counselor 25 years from now and still enjoy it as much as I do now."

3) Good Boundaries and Burnout. In their narratives, students described the importance of clear and strong boundaries, describing boundaries as a preventative against burnout impacting their personal and professional lives. These boundaries include boundaries with workload ("shouldn't take on too much"), boundaries between work and home ("taking work home"), and boundaries between self and others ("care-taking" or "taking on another's pain").

4) Hopefulness. Several students spoke with hopeful confidence about their ability to manage stress and preempt burnout. They were particularly hopeful about the mindfulness/self-care course and skills that they might learn, as well as the benefits of supervision and peer groups. One student expressed her hopefulness, writing, "I hope that by learning to be more mindful on a daily basis, I will be in a better position to recognize when I need to take a breather and tend to myself so that I don't have a negative impact on my clients." After noting her worries, this participated reflected, "however, I am building a lifestyle now that will help defend against stress and burnout. I am creating a network of like-minded peers who can help to support me clinically and personally."

End of Semester

When students were asked about the impact of stress on their clinical lives at the end of the mindfulness course, the following themes emerged: (a) therapeutic relationship, (b) increased awareness of stress and burnout, and (c) self-compassion.

Therapeutic Relationship Several sub-themes emerged within the theme of therapeutic relationship. These were (a) increased ability to be present with clients, (b) increased empathy for clients, and (c) less emotional reactivity with clients.

1) Increased Ability to be Present with Clients. Many students commented on the positive impact that mindfulness and self-care have on their ability to be present with clients. A student wrote,

"The very first change that I noticed after a couple of meetings was that I became more mindful. I started living more in the present and enjoying minute-to-minute experience. In the therapy room, it allowed me to be more present with my clients and be a better observer of what was going in the room and between us."

Another participant discussed how being present "slows down" the therapeutic process, bringing each moment into greater focus and allowing for greater empathy:

"This has also helped me to slow down and be more fully present in the room and inside myself. It has increased my ability to help clients to slow down and explore their current experience. I think before taking this class, I was very action oriented in sessions, which came across as agenda pushing. Now, I think my sessions move more slowly and demonstrate more depth and true empathy."

2) Increased Acceptance and Empathy for Clients. Students reported an increase in empathy and acceptance towards their clients as an outcome of mindfulness and self-care practices. This participant discussed how her practices have allowed her to increase her ability to see client's uniqueness and join others more readily:

"Increasing my level of self-care throughout the semester has certainly helped in terms of working with people in that I am now more accepting of them as unique individuals and when I am less stressed I am more able to join with them in the current moment."

A student acknowledged the decrease in empathy that he feels towards clients when he is anxious:

"I know that if I am feeling anxious or stressed it can be a distraction from what is happening in the room. I find that my mind wanders more frequently and I feel less empathic towards my clients… Knowing this has further solidified the realization of the importance of self-care and stress management. This work will always be stressful and anxiety provoking. I think understanding this is crucial, as well as actively engaging in stress management techniques and getting plenty of supervision."

3) Decrease in Emotional Reactivity. Students discussed their increased ability to tolerate difficult emotions in the therapeutic relationship. These emotions included those observed in the client, by the clinician. This participant journaled, "When I feel stressed, I am not centered inside my body and my ability to be calm, present, and attuned to my client's state is diminished. If my client is in stress mode, I may be reactive and if so, my stress level goes up." Another student noted that her fear of painful affect has decreased since she began practicing mindfulness, "I feel that I am less reactive and more empathic. I am not afraid to sit with someone when they are in distress anymore; I feel like I do not move away from pain so rapidly anymore." The following participant noted the relief mindfulness brings to the fledgling clinician as she grapples with difficult silences, "I am able to sit with my clients and allow them to experience their emotions in silence without needing to say something because I am uncomfortable."

Increased Awareness of Stress and Burnout At the end of the semester, many participants acknowledged the importance of being aware of stress and burnout, and the effect this can have on their clinical practice. Reflecting on the benefits of awareness, one student wrote, "I think that just being aware of the possibility of burnout, will help me to work to prevent it." Mindfulness practices were endorsed as "key to this process." Awareness and attention were noted as preventative factors to anxiety for another student as well,

"I think stress and anxiety impact my work with people a lot less than they used to because now when I experience these things, I make it a point to pay attention to what they are telling me. This awareness usually leads me to step back and reevaluate whatever stressful situation I'm dealing with at the time and reframe it or take some self-care time to help alleviate some of my anxiety."

Here, a student discussed her "acknowledgement" of feelings within the context of clinical work and her confidence about attending to those feelings,

"With increasing client exposure, I have come to realize how draining and demanding this profession can be. Nevertheless, I am committed to taking care of myself and am confident in my ability to acknowledge my feelings and attempt to take action and remedy them. I feel strongly that it is challenging to properly care for others if I am feeling in a bad mental or emotional space."

Self-Compassion Many students endorsed a new degree of self-compassion gleaned from mindfulness practice. They wrote of increased acceptance and non-judgmental attitude towards their own clinical abilities and limits. "Over the course

of semester," a student journaled, "anxiety regarding my counseling skills has also decreased significantly. I am more forgiving of my growing pains than I have been in the past. I am more able to accept that it takes time to feel competent." Another student wrote about how pressure to "do something" has decreased for her, "I feel more calm working with people than at the beginning of the semester. I think this comes from putting less pressure on myself to perform, reply instantly, offer amazing insight, use the right skill, and to 'do something.'" This participant discussed how the onus of change has shifted for her. She wrote,

"I also have set a personal boundary of not judging myself too critically and have shifted my thinking away from believing it is my responsibly for a client to change. I try to remember that change is partly my work with a client and also a choice on the part of the client."

Students noted the importance of boundaries when reflecting on self-compassion. A student journaled,

"My boundaries are definitely much better. I realized that I am important and that I can't spend all my energy trying to help others, forgetting often about myself. Being more gentle with myself and respect my mind and body, giving myself space and time to feel vulnerable, sick, or tired, without trying to always fight it or push my limits all the time. I guess, what comes with it is feeling less responsible for my clients' well being and realizing that they are the ones who have power to change and I can't do all the work for them."

Discussion

An examination of counseling students' perceptions of stress over a 15-week mindfulness course suggests that mindfulness training may be beneficial as a prophylactic for stress and burnout for psychotherapists, counselors, and other mental health care workers. Qualitative analysis of student responses yielded five themes at the beginning of the semester associated with management of stress and burnout in personal and clinical lives: (a) causes of stress, (b) manifestations of stress, (c) importance of maintaining a present-moment orientation, (d) concern about burnout, and (e) hopefulness. End-of-semester responses yielded the following themes: (a) awareness, (b) acceptance, (c) therapeutic relationship, (d) increased awareness of stress and burnout, and (e) self-compassion. Most of these themes included sub-themes as detailed in the "Results" above.

Themes shifted notably across the semester as students' journals reflected different perspectives on stress and burnout at the end of the semester in comparison to the beginning. These differences reveal both an improved ability to be less

negatively affected by stress, as well as, new or enhanced resources and strategies to combat burnout. The thematic changes that occurred in this qualitative inquiry bode well for all mental health professionals, as they illustrate the positive impact that a mindfulness course can have on clinicians.

Badger et al. (2008) found *emotional separation*, defined as the ability to differentiate the self from the client, to be a factor in preventing burnout and compassion fatigue. Students in our study described an increased ability to regulate emotional reactions to stress and clinical material. In many students' post-semester responses, they described experiencing their own thoughts and feelings with less attachment and judgment, as if there was a newfound ability to stand outside of stress. This kind of capacity to witness is similar to the ability to *reperceive* described by Shapiro et al. (2006) who suggested this as a psychological mechanism of action related to mindfulness training. Through the cultivation of mindfulness, one may facilitate an ability to reperceive or observe one's thoughts and feelings as temporary events in the mind rather than as reflections of the self. Our study supports that use of mindfulness training to decrease levels of burnout and compassion fatigue in therapists may help them alter the way they experience the stress inherent in the field.

Follette et al. (1994) found *perceived coping ability*, the belief one has the ability to cope with and solve problems, to mediate the development of burnout and compassion fatigue. Students in the Mind–Body course attested to a newfound confidence in their ability to combat stress and burnout, and pointed to their practices of mindfulness, yoga, qigong, and other self-care strategies as key to prevention. Many participants stated that they were "more confident" and described themselves as more self-compassionate and less wary of burnout. They described these changes as largely an outcome of their increased capacity for awareness and acceptance—both principles and manifestations of mindfulness practice.

The participants in our study were required to participate in mindfulness practice 6 days a week for at least 45 min. Over the course of the semester, the students cultivated understanding and skills in various practices. As indicated in the pre-versus-post-semester responses, many of these students had not, prior to this course, practiced self-care practices to address stress aside from healthy diets and exercise. Students in this study indicated that their self-care strategies improved their ability to manage stress and mediate the development of burnout and compassion fatigue.

At the end of the Mind–Body class, the students described an increase in self-compassion regarding both their ability to handle stress and their limited clinical experience. Such findings are supported by other researches on how mindfulness training can foster self-compassion (Neff 2003a; Shapiro et al. 2007). In a quantitative study, Kingsbury (2009) explored the relationship between mindfulness, empathy, and self-compassion using self-report measures. Kingsbury found self-compassion to have a strong positive correlation with empathic concern, indicating that self-compassion, which is impacted by mindfulness practice, may be instrumental in compassion for others—a key component of resonating and connecting with clients.

As participants cultivated greater awareness through their mindfulness practice, they also described an increased awareness of bodily states, specifically their felt sense of stress. Pre-semester bodily manifestations of stress were inventoried with seeming frustration, while students described the body as a barometer of stress post-semester. This change from pre-semester responses to post-semester responses supports the concept that the body can be an ally as opposed to a burden when feelings and sensations are allowed to emerge and accepted.

We found overall that the participants' responses at the end of the semester were more verbose and nuanced, and seemed to indicate more interest and capacity for self-reflection than the responses at the beginning of the semester. Additionally, more students chose to respond to the end-of-semester questions, with 41 students responding as opposed to 28 responses at the beginning of the semester. This finding reflects not only greater knowledge of and interest in the material but also an internalization of the knowledge, attitudes, and behavior that students cultivated through the class.

This present study had several limitations that should be considered in planning future research. Although the course was a requirement for students in the Mental Health Counseling track, the class included some students from the two other tracks within the counseling graduate program, who self-selected the course as an elective; therefore, the study may include selection bias. A second source of selection bias may be due to the study's reliance on voluntary participation. However, due to the comparably high proportion of end-of-the semester responders, this bias is likely minimal.

Participants in this study were in a rural, mountain state university, and the results may not be generalizable to other geographic areas. Most notably, almost all participants were White women; therefore, the results may be influenced by gender, culture, and race/ethnicity. Based on the primary investigator's years of teaching the course, reading student journals, and witnessing student experiences, no perceptible patterns related to age or gender have been observed. However, a greater number of male participants may have illuminated something yet undetermined. Of note is that the number of men in the study approximately reflected the proportion of in the graduate program. All of the students involved in this study were master's-level counseling students, and the results may not generalize to trainees in other mental health professions. Finally, although the responses were

anonymous and not mandated, social desirability may have impacted those students who chose to share their experiences.

A more robust understanding of this research would be made possible by a 6-month or 1-year follow-up qualitative survey to understand whether participation in this class helped these students manage stress and if they continued mindfulness practices beyond this training. Quantitative research would be necessary to gain a more accurate understanding of the scope and magnitude of the kind of changes that our study identified.

Longitudinal studies of the prevalence of burnout among therapists who receive mindfulness training would help measure the effects of mindfulness as preventative medicine for stress-induced attrition in the field. Moreover, it would be valuable to investigate the impact of mindfulness training through continued education on those therapists who have worked in the field for a seasoned amount of time and may be actively experiencing burnout. We also look forward to more research like that pioneered by Grepmair et al. (2007a, b), which examines outcome data on clients whose therapists practice mindfulness.

There is little literature on the pedagogy of integrating mindfulness practice into the curriculum of psychology or counseling graduate programs. Fulton (in press) provides a useful overview of the general issues involved. Elsewhere, Christopher, an author of this paper, has discussed in more detail the approach behind the course that is part of this research (Campbell and Christopher 2012; Christopher and Maris 2010). Braud (2006) provides a rich account of the integration of contemplative and spiritual practices into a training program that is explicitly transpersonally focused, while Christu et al. (in press) describes the integration of contemplative and meditative practices into a course in an accredited counseling psychology program. Several studies such as those of Gockel et al. (2012) and McCollum and Gehart (2010) have examined incorporating brief mindfulness training (5–10 min per class or per day) without needing to significantly alter curricula. Other teachers and researchers have utilized MBSR-based models to teach mindfulness in professional graduate programs (e.g., Shapiro et al. 2007). Research is needed to begin to assess the best ways to integrate mindfulness training into curricula and assess curricula effectiveness.

The present research suggests that mindfulness training may foster students' awareness of stress and increase skills and strategies that are associated with preventing burnout. As students expand their skills based in mindfulness practices, their confidence regarding how to deal with burnout may increase. This study supports a growing body of evidence that mindfulness training fosters mental health and is an important component in counselor training. Institutions and accreditation organizations can promote satisfaction and longevity in the field by prioritizing mindfulness training into curricula.

Appendix

The five open-ended questions in the survey are the following:

1. To what extent do you see stress as a problem in your life?
2. How effective do you see yourself at managing stress in your life?
3. What do you typically do to take care of yourself?
4. To what extent do you see stress and anxiety impacting your work with people?
5. As a future healthcare provider/counselor how concerned are you with burnout?

References

Badger, K., Royse, D., & Craig, C. (2008). Hospital social workers and indirect trauma exposure: an exploratory study of contributing factors. *Health and Social Work, 33,* 63–71.

Baer, R. (2003). Mindfulness training as a clinical intervention: a conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*(2), 125–142.

Baker, E. K. (2003). *Caring for ourselves: a therapist's guide to personal and professional well-being.* Washington, DC: American Psychological Association.

Bishop, S. (2002). What do we really know about mindfulness-based stress reduction? *Psychosomatic Medicine, 64,* 71–84.

Bonadonna, R. (2003). Meditation's impact on chronic illness. *Holistic Nurse Practitioner, 17*(6), 309–319.

Braud, W. (2006). Educating the "more" in holistic transpersonal higher education: a 30+ year perspective on the approach of the institute of transpersonal psychology. *Journal of Transpersonal Psychology, 38*(2), 133–158.

Brown, K., & Ryan, R. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822–848.

Campbell, J. C., & Christopher, J. C. (2012). Teaching mindfulness to create effective counselors. *Journal of Mental Health Counseling, 34*(3), 213–226.

Christopher, J. C., & Maris, J. (2010). Integrating mindfulness as self-care into counselling and psychotherapy training. *Counselling and Psychotherapy Research, 10,* 114–125.

Chrestman, K. R. (1999). Secondary exposure to trauma and self reported distress among therapists. *Professional Psychology: Research and Practice, 30,* 383–393.

Christu, M., James, S., Caglayan, A., Gadermann, A., Klaassen, D., & Slocum, S. (in press). Exploring How Contemplative Practices Can Inform Counseling Psychology and Counselor Training. *Counseling & Spirituality.*

Cohen, J. S., & Miller, L. (2009). Interpersonal mindfulness training for well-being: a pilot study with psychology graduate students. *Teachers College Record, 111,* 2760–2774.

Craig, C. D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress and Coping, 23,* 319–339.

Davis, D. M., & Hayes, J. A. (2011). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy, 48,* 198–208.

Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: an overview. In C. R. Figley (Ed.), *Compassion fatigue: coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1–20). New York: Brunner/Mazel.

Follette, V., Polusny, M., & Millbeck, K. (1994). Mental health and law enforcement professionals: trauma history, psychological symptoms, and impact of providing services to child sexual abuse survivors. *Professional Psychology: Research and Practice, 25*, 275–282.

Fulton, P. (in press). Mindfulness and clinical training. In C. K. Germer, R. D. Siegel & P. R. Fulton (Eds.), *Mindfulness and psychotherapy*, (2nd Ed). New York: Guilford Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago, IL: Aldine Publishing.

Gockel, A., Burton, D., James, S. & Byer, E. (2012). Introducing mindfulness as a self-care and clinical training strategy for beginning social work students. *Mindfulness,* 1–11. doi:10.1007/s12671-012-0134-1.

Grepmair, L., Mitterlehner, F., Loew, T., Bachler, E., Rother, W., & Nickel, M. (2007a). Promoting mindfulness in psychotherapists in training influences the treatment results of their patients: a randomized, double-blind, controlled study. *Psychotherapy and Psychosomatics, 76*(6), 332–338. doi:10.1159/000107560.

Grepmair, L., Mitterlehner, F., Loew, T., & Nickel, M. (2007b). Promotion of mindfulness in psychotherapists in training: preliminary study. *European Psychiatry, 22*(8), 485–489. doi:10.1016/j.eurpsy.2007.02.004.

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: a meta-analysis. *Journal of Psychosomatic Research, 57*(1), 35–43.

Hsieh, H. F., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277–1288.

Huberman, A. M., & Miles, M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.

Imai, H., Nakao, H., Tsuchiya, M., Kuroda, Y., & Katoh, T. (2004). Burnout and work environments of public health nurses involved in mental health care. *Occupational and Environmental Medicine, 61*, 764–768.

Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion, 10*, 54–64.

Kahill, S. (1988). Symptoms of professional burnout: a review of the empirical evidence. *Canadian Psychology/Psychologie Canadienne, 59*, 284–297.

Kingsbury, E. (2009). The relationship between empathy and mindfulness: understanding the role of self-compassion. *Dissertation Abstracts International, 70*(5-B), 3175.

Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. In S. Oskamp (Ed.), *Applied social psychology annual* (Vol. 5, pp. 133–153). Beverly Hills: Sage.

McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: a framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*, 131–149.

McCollum, E. E., & Gehart, D. R. (2010). Using mindfulness meditation to teach beginning therapists' therapeutic presence: a qualitative study. *Journal of Marital and Family Therapy, 36*(3), 347–360.

Neff, K. D. (2003a). Self-compassion: an alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85–102.

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223–250.

Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. London: Sage.

Rich, K. D. (1997). Vicarious traumatization: a preliminary study. In S. B. Edmunds (Ed.), *Impact: working with sexual abusers* (pp. 75–88). Brandon: Safer Society.

Schauben, L. J., & Frazier, P. A. (1995). The effects on female counselors of working with sexual violence survivors. *Psychology of Women Quarterly, 19*, 49–64.

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and Education in Professional Psychology, 1*, 105–115.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*, 373–386.

Shapiro, S. L., Schwartz, G. E., & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine, 21*, 581–599.

Schure, M. B., Christopher, J. C., & Christopher, S. (2008). Mind–body medicine and the art of self-care: teaching mindfulness to counseling students through yoga, meditation, and Qigong. *Journal of Counseling & Development, 86*, 47–56.

Strauss, A., & Corbin, J. M. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory*, (2nd Ed). London: Sage.

Thomson, R. (2000). Zazen and psychotherapeutic presence. *American Journal of Psychotherapy, 54*(4), 531–548.

Tremlow, S. (2001). Training psychotherapists in attributes of mind from Zen and psychoanalytic perspectives: Part II. Attention, here and now, nonattachment, and compassion. *American Journal of Psychotherapy, 55*(1), 22–39.

Vredenburgh, L. D., Carlozzi, A. F., & Stein, L. B. (1999). Burnout in counseling psychologists: type of practice setting and pertinent demographics. *Counseling Psychology Quarterly, 12*, 293–302.