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Sheila Thorn Stress Reduction for Helping Professionals: A Mini Yoga Intervention (A Pilot Study)

ABSTRACT

This study examined the efficacy of a two-minute yoga intervention used during the working hours of helping professionals. It explores the benefits of self-care and stress reduction methods for helping professionals. Participants engaged in a two-week study in which they were asked to rank their stress before and after using of the yoga intervention during their workday. Findings supported the stress reduction benefits of the yoga intervention for the participants.

STRESS REDUCTION FOR HELPING PROFESSIONALS: A MINI YOGA INTERVENTION (A PILOT STUDY)

A project based upon an independent investigation, submitted in partial fulfillment of the requirements for the degree of Master of Social Work.

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ACKNOWLEDGEMENTS

To my friends and family, Mom, Sharon, Heidi, Faith, and Kara, your tireless commitment to help those with whom you work inspired this study. Thank you for all your hard work and dedication to your students, patients, and the communities you help to build and maintain. To my research advisor, Michael Murphy, thank you for helping me to keep it all in perspective. To my sweet husband, Mike, thank you for your support, love, and patience.

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CHAPTER I

Introduction

Workplace stress is common to all professions in all fields. This study examines the stress level of a variety of helping professionals and attempts, using a mini yoga intervention, to reduce helping professionals' perceived stress level at work. Helping professionals are particularly susceptible to workplace stressors because they are tasked with assisting their clients and, at times, the client's family, in times of high need. Balancing the needs and emotions of the client and their family with the needs and emotions of the helping professional can be a delicate and difficult task. Whether the helping professionals are educators, doctors, nurses, social workers, or police officers, they are often required to place the emotions and needs of others before their own. This job requirement causes helping professionals to disconnect their outward reaction with their authentic internal emotions causing incongruence in the expressed emotion and the internal or experienced emotion (Brotheridge & Grandey, 2005).

The helping professions are necessary and important professions for every member of our society. Helping professionals have consistently high demands placed on them. They help vulnerable populations in highly regulated settings that can be challenging to navigate. Helping professionals are often driven to help those in need and a complicated system in which to perform this job increases the stress level of helping professionals. Some helping professionals experience high demands and low pay; while others experience the threat of being exposed to violence and non-traditional working hours. Some helping professionals experience limited support, high staff turnover, limited access to resources, and instability in funding sources for

their salaries. All of these factors, and many more, can contribute to high workplace stress and even lead to burnout (Edelwich & Brodsky, 1980).

The risks of helping professionals having high stress levels are not just relevant to the helping professionals themselves but to the clients with whom they work. A helping professional who is experiencing high levels of ongoing stress may have more absences from their job due to the physical symptoms of stress and the mental fatigue (Bickley, 1998). They may also experience a decrease in morale and sense of accomplishment in their daily job. Chronically stressed helping professionals are at an increased risk for making errors while working. This is particularly alarming when considering the nature of some helping professionals' jobs (nurses, doctors, police officers, paramedics, etc.). They also may experience an increase in interpersonal conflicts both at home and at work (Bickley, 1998). These conflicts may lead to a decreased level of support both on and off the job. Finally, chronic stress may lead to an increased level of burnout among helping professionals, leading to high turnover rates in the places that employ helping professionals (Edelwich & Brodsky, 1980).

All of these risk factors support the need for having an easy, accessible way for helping professionals reduce to their perceived stress level during working hours. If helping professionals have a healthy option that can be used at their discretion, there may be an increased chance for the helping professional to make use of the stress reduction intervention. As the symptoms of chronic stress are decreased by a healthy stress reduction intervention, helping professionals may notice an increase in their work performance, morale, attention and focus, level of support, and motivation (Karasek & Theorell, 1990). They also may notice a decrease in, errors, turnover, injuries, and interpersonal conflicts, both at home and at work (Bickley, 1998; van der Klink, Blonk, Schene, & van Dijk, 2001).

Prior studies have advocated for the use of Mindfulness Based Stress Reduction (MBSR) methods to reduce the stress level of all types of professionals (Grossman, Neiman, Schmidt, Walach, 2004; Kabat-Zinn, 2003; Klatt, Buckley, & Malarkey, 2009; Newsome, 2010; Newsome, Christopher, Dahlen, & Christopher, 2006). Helping professionals, as a group, have not been closely studied in this regard. Smaller, more specific, homogeneous groups of helping professionals, such as counseling graduate students, nurses, and educators, have been subject of stress reduction intervention studies. MBSR has been found to be effective at reducing the stress level of these distinct groups of helping professionals and in other professionals (Grossman, Neiman, Schmidt, Walach, 2004; Kabat-Zinn, 2003). Even modified versions of MBSR have been proven effective in a number of studies (Klatt, Buckley, & Malarkey, 2009).

Yoga is one component of any of the MBSR studies. It also has been studied and found to be effective as a stress reduction intervention (Smith, Hancock, Blake-Mortimer, & Eckert, 2007). Yoga is an ancient Indian philosophy that offers suggestions on how to relate to others (yama) and self (niyama), engage in exercise (asana), engage in breathing exercise (pranayama), and engage in several types mediation (pratyahara, dharana, dhyan, samadhi) with the goal of attaining a sense of a cohesive self (Iyengar, B., 1969). This study makes use of the efficacy of yoga and MBSR as stress reduction interventions and further modifies this type of stress reduction intervention to make it more accessible and manageable for the participant.

This study proposes that a two-minute yoga intervention should have a positive effect on reducing the perceived (subjective) stress level of helping professionals when used during their working hours. It sets out to prove the efficacy of the two-minute yoga intervention by recruiting a variety of helping professionals with a variety of experience levels to get a diverse group of participants. Assisting helping professionals to reduce their on the job perceived stress level

using this intervention will help not just the helping professional but the clientele, co-workers, and family with whom they interact.

CHAPTER II

Literature Review

A kind person once shared the following thought, "everyone thinks they have the toughest job in the world." In most workers' opinions, *they* do and comparing job stressors is unnecessary. Ramanathan (1991) explained, "stress occurs when there are demands on the person which exceed his/her coping adaptation resources" (p. 28). This statement bears some consideration; everyone, regardless of his or her chosen profession, experiences work stress, it is inevitable and necessary for productivity. It becomes problematic when the worker experiences too much stress, can not cope, and the stress thereby hinders his/her ability to effectively carry out work duties. This study addressed the worker's ability to reduce work stress during working hours, specifically workers employed in the helping professions.

In the current literature, researchers have theoretically and empirically examined the connections between stress and the helping professionals. Academic researchers and those who have practical experience working in helping professions have carried out studies to better understand these connections (Maslach & Goldberg, 1998). The main concern of the researchers of either type is that stress in the helping professions has a strong connection to *burnout* and *compassion fatigue*.

Burnout has a wide reaching impact. It undermines the professional by causing him/her to feel ineffective in his/her job role, unsupported by colleagues and supervisors, and emotionally exhausted. It also impedes the work of the place of employment by driving up costs due to loss of worker's time, high staff turnover, and a decrease in worker's productivity (Acker, 1999;

Brotheridge & Grandey, 2005; Edelwich & Brodsky, 1980; Harden, 1999; Maslach & Goldberg, 1998; Morrice, 1984; Pines, 2002; Pines & Maslach, 1978; Ratliff, 1988; Schwab, Jackson, & Schuler, 1986).

Compassion fatigue can be considered a symptom of burnout. Compassion fatigue is defined as "a state of tension and preoccupation with traumatized patients by re-experiencing the traumatic events, avoidance/numbing of reminders persistent arousal (e.g. anxiety) associated with a patient" (Figley, 2002, p. 1435). Helping professionals' connections to and their beliefs about the efficacy of their work with the people they are tasked to help can lead to feelings of inadequacy in this capacity and can aggravate the symptoms of burnout, stress, and compassion fatigue. Conversely, feeling confident in this capacity can help to mitigate the symptoms of stress, compassion fatigue, and burnout. If helping professionals are able to engage in activities of self-care, such as yoga, meditation, or other activities, they are better able to combat burnout. Baker (2003) stated, "yet in reality, self-care, personally and professionally, may ultimately be the most important thing that we do – not just for ourselves but also for our clients" (p. vii). Yoga is a type of self-care easily accessible to helping professionals.

The Oxford English Dictionary (2010) has defined *helping* as, "the action of help; help, aid, assistance, succour". (p. #) *Profession* is defined by the same source as, "an occupation in which a professed knowledge of some subject, field, or science is applied; a vocation or career, especially one that involves prolonged training and a formal qualification." (p. #) Therefore, for the purposes of this study, helping professions were defined as any profession that is directly tasked with assisting others to improve their mental and/or physical health either through educational, physical or psychological interventions. Helping professionals are those who have received specialized training in one of the helping professions.

Helping professionals in general are rarely the main focus of the stress management/stress reduction literature; there are a relatively low number of studies that target stress reduction for helping professions (Baer, 2003; Bickley, 1998; Christopher, Christopher, Dunnagan, & Schure, 2006; Edelwich & Brodsky, 1980; Figley, 2002; Mann, 2004; Maris, 2009; Newsome, 2010; Newsome, Christopher, Dahlen, & Christopher, 2006; Pines, 2002; Pugliesi, 1999; Ramanathan, 1991; Ratliff, 1988; Rosenzweig, Reibel, Greenson, Brainard, & Hojat, 2003; Schure, Christopher, Christopher, 2008; Simard & Henry, 2009; Tennent, 2001; Valente & Marotta, 2005). Most of these studies targeted a particular group within the population of helping professionals, such as nurses, teachers, medical students, and others. Few have looked at helping professionals as a whole group (Brotheridge & Grandey, 2005; Mann, 2004; Pines, 2002; Pugliesi, 1999; Ratliff, 1988).

Helping professionals face unique challenges that increase the stakes of burnout due to the nature of their work. "Our work can be intensely demanding, frustrating at moments, and sometimes terrifying" (Baker, 2003, p. 3). Helping professionals, despite the variety of tasks, roles, and responsibilities, have similar stressors that are a result of the *emotional labor* needed for their professions. Emotional labor is the level of the demands of the occupation ("jobfocused"). It can also be defined as the experience of the worker's managing their emotions and emotional expressions to meet the demands of the job ("employee-focused"). The *emotional dissonance* that helping professionals experience can contribute to feelings of depersonalization, emotional exhaustion, and diminished personal accomplishment (Brotheridge & Grandey, 2005), all of which are symptoms of burnout (Brotheridge & Grandey, 2005; Harden, 1999; Morrice, 1984; Ratliff, 1988). No matter what is happening, helping professionals are usually tasked with

being the calm, rational, "in charge" person in high stress situations. Helping professionals often see this as being part of their job. This can lead to feelings of emotional dissonance.

To try to diminish the effects of work stress in the helping professions, helping professionals employ any number of coping mechanisms. Among the many healthy and unhealthy coping mechanisms, mindfulness has been suggested as a coping technique and has been studied by many scholars (Baer, 2003; Bishop, 2002; Dimidjian & Linehan, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Gunaratana, 2002; Haynes & Wilson, 2003; Hickey, 2010; Kabat-Zinn, 2003; Klatt, Buckworth, & Malarkey, 2009; Lawson & Horneffer, 2002; Maris, 2009; Newsome, 2010; Newsome, Christopher, Dahlen, & Christopher, 2006; Roemer & Orsillo, 2003; Rosenzweig, Reibel, Greenson, Brainard, & Hojat, 2003; Smith, Shelley, Dalen, Wiggins, Tooley, & Bernard, 2008; Teasdale, Segal, & Williams, 2003). The studies of mindfulness programs, namely Mindfulness Based Stress Reduction (MBSR) developed by Jon Kabat-Zinn, have shown that mindfulness interventions are successful as stress reduction interventions, especially when remediating work stress (Baer, 2003; Bishop, 2002; Dimidjian & Linehan, 2003; Grossman, Niemann, Schmidt, & Walach, 2004; Gunaratana, 2002; Haynes & Wilson, 2003; Hickey, 2010; Kabat-Zinn, 2003; Klatt, Buckworth, & Malarkey, 2009; Lawson & Horneffer, 2002; Maris, 2009; Newsome, 2010; Newsome, Christopher, Dahlen, & Christopher, 2006; Roemer & Orsillo, 2003; Rosenzweig, Reibel, Greenson, Brainard, & Hojat, 2003; Smith, Shelley, Dalen, Wiggins, Tooley, & Bernard, 2008; Teasdale, Segal, & Williams, 2003). Baer (2003) described mindfulness as "intentionally bringing one's attention to the internal and external experiences occurring in the present moment, and is often taught through a variety of meditation exercises" (p. 125). One of the "meditation exercises" incorporated into MBSR is yoga.

Yoga, on its own, is considered a mindfulness intervention (Baer, 2003; Bishop, 2002; Klatt, Buckworth, & Malarkey, 2008). Yoga postures allow the practitioner to draw their attention to moment-to-moment internal and external stimuli by using bodily sensations as the singular focus (Baer, 2003; Bishop, 2002). Yoga has been long touted as an effective stress reduction activity (Mayo Clinic Staff, 2010; Smith, Hancock, Blake-Mortimer, & Eckert, 2007). In the Smith et. al. (2007) study the researchers found that a short-term yoga intervention (on average, five, one-hour long classes) is effective, both in the short- and long- term, for decreasing participant reported stress. In their study the authors asked participants to commit to ten weekly yoga sessions and then administered a follow up survey six weeks after the tenth week. They recruited 131 participants; however, the participants' attendance to the weekly classes varied and for some participants was not consistent. Despite the difficulty for some of the participants to regularly attend the sessions, they found that those who attended at least five sessions had a long lasting stress reduction effect.

In contrast to the Smith et. al. (2007) study, where participants completed five, one-hour long sessions, Kabat-Zinn's (2003) Mindfulness Based Stress Reduction (MBSR) intervention requires 26 hours of face-to-face contact over eight weeks; the 26 hours are split into eight, 2 ½-hour class sessions and one 6-hour full day session. Participants are also required to complete approximately one hour of additional work daily, which can consist of sitting in mediation or participating in a yoga practice (Baer, 2003; Klatt, Buckworth, & Malarkey, 2008). Most studies of MBSR have supported it's efficacy in lowering stress perception and increasing burnout resiliency. Researchers have also advocated for its use in a variety of settings and for further study, and have suggested making changes to several factors, such as length of time, format of trainings, and other factors (Baer, 2003; Bishop, 2002; Grossman, Niemann, Schmidt, & Walach,

2004; Haynes & Wilson, 2003; Kabat-Zinn, 2003; Klatt, Buckworth, & Malarkey, 2009; Roemer & Orsillo, 2003; Rosenzweig, Reibel, Greenson, Brainard, & Hojat, 2003; Smith, Shelley, Dalen, Wiggins, Tooley, & Bernard, 2008; Teasdale, Segal, & Williams, 2003).

While MBSR has been found to be effective, it is a lengthy program and requires a significant daily commitment. If a helping professional enrolls in the program, they are signing up for all eight weeks of the program, for the twenty-six plus hours of the program. For example, if a teacher enrolled in a MBSR program, he would teach all day, attend to his after school duties (after school help hours, grading duties, lesson planning, meetings, and/or other activities), and then attend the 2 ½ hour session. While this is not an everyday schedule, participants are engaged in the MBSR program for 8 ½ hours per week for seven weeks and 14 ½ hours during the remaining week. The time requirements may discourage a helping professional already feeling stressed and overwhelmed by their work responsibilities from enrolling in the program. The program efficacy, to an overwhelmed, stressed helping professional, may not be as attractive when the time requirements are factored in, as such participants must be highly motivated to participate in the program (Klatt, Buckworth, & Malarkey, 2008).

Klatt, Buckworth, and Malarkey (2008) modified Kabat-Zinn's original MBSR program structure. They found that for the program to be sustainable and realistic one needs to keep in mind whom the program is serving. The researchers argued, "...participants must make a considerable time commitment on a weekly and a daily basis" (p. 602), and identified this time commitment as one of the "barriers to effective implementation" (p.602). To address this barrier, Klatt et al. adapted the original MBSR program to be a time limited version. Their adaptation is termed "low-dose mindfulness-based stress reduction (MBSR-ld)." They shortened the overall length of the project from eight weeks to six weeks and shortened the weekly meetings from 2

1/2 hours to 1 hour. The weekly MBSR-ld sessions took place in the location where the participants were employed during lunch hours (Klatt, Buckworth, and Malarkey, 2008). Finally, they shortened to at-home mindfulness practice to 20 minutes only on workdays.

Klatt, Buckworth, and Malarkey (2008)'s changes to Kabat-Zinn's program allowed the program more accessibility to those employed as full time professionals. Klatt et al.'s data suggest that their program was as effective as the original MBSR program, both in the long- and short- term. The final change that the authors made to the MBSR program was to the yoga portion of the mindfulness program. MBSR uses hour-long sessions of hatha yoga as a mindfulness practice for participants. The MBSR-ld program tailored the yoga practice to take place during the weekly meeting. Participants were not required to change clothes or use yoga mats. The yoga poses could be performed sitting or standing in limited space. The authors reported success at modifying MBSR to a shortened version and suggested that further modifying the time requirements and making certain portions of the intervention at the discretion of the participant could also be successful in mitigating the perceived stress of the participants.

Cohen, Kamarck, and Mermelstein (1983) proposed that the perception of stress only occurs in situations that are deemed threatening or demanding, during which the person in the situation does not have the resources to cope with the increased demands (p. 386). The authors also proposed that the effects of stress are cumulative. Therefore, having participants record perceived stress levels and engaging in the intervention during working hours it provides a more accurate representation of participants' level of perceived stress and more effective way to reduce stress. It is natural to draw the conclusion based on Cohen et al.'s (1983) findings that this cumulative nature of perceived stress and the high demands of the helping professions necessitate targeted stress reduction interventions.

Bekker, Nijssen, and Hens (2001) took this a step further with their study. They determined that particular attention should be devoted to training women in stress reduction techniques. Their findings showed that "stress prevention training" is effective for both men and women, but since women, as a group, "started as well as finished training at higher stress level" (p. 216), they advocated for gender specific trainings. Since many of the helping professions are female dominated fields studies targeting helping professionals will inevitably target more women.

In contradiction to the belief in the efficacy of yoga as a long term effective mediator of stress, the authors of one study (Ghoncheh & Smith, 2004), suggested that yoga may not be the most effective stress reduction intervention. They found that progressive muscle relaxation is more effective at promoting relaxation and, therefore, a more effective stress reduction method. In their findings they reported that progressive muscle relaxation techniques may not be as immediately effective; however, when using progressive muscle relaxation over a longer period of time (five weeks in the study) the stress reduction impact is longer lasting and more effective as compared to yoga (stretching) techniques. In Ghoncheh & Smith's study, the version of yoga they used is only stretching. Other versions of yoga make use of breathing exercises while performing the physical stretches.

CHAPTER III

Methodology

This project examined the effect of a stress reduction intervention developed for helping professionals to use during their working hours. The research question this study examined was: what is the effect of introducing a mini-yoga intervention, for use during working hours, on the perceived stress level of helping professionals? The intervention consisted of a breathing exercise and four yoga poses (see Appendix E), all of which take approximately two minutes to complete. This study quantitatively measured the impact of the intervention on the perceived stress level of the helping professionals participating in the study. The participants anonymously practiced daily breathing exercises and yoga poses, and reported their stress level using a scale rating of 1 to 5, 1 = little or no stress, 2 = some stress, 3 = moderate stress, 4 = high stress, and 5 = extreme stress.

Participants were those trained and employed in the "helping professions." For the purpose of this study, helping professions were defined as a profession that is directly tasked with assisting others to improve their mental and/or physical health either through educational, physical or psychological interventions. Professionals of all experience levels were welcomed to participate in the study, including those who were participants in practicums for their field of study (such as student teachers, student nurses, graduate social work interns). Since all of the intervention instructions and survey questions were posted online, access to a computer and the internet was required.

Candidates were excluded if they did not fit the definition for helping professional as defined for this study. Participants were also excluded if they could not commit to participating in the study for a period of at least two weeks. Further, participants who determined they were not healthy enough for simple stretches or a basic breath awareness exercise were excluded.

The eleven participants self identified as helping professionals and self selected as participants in this study. There were 97 unique data entries from the eleven participants. Their job titles are comprised of counselors, clinical counseling interns, teachers, nurse practitioners, teachers, and youth workers. Upon logging on to the survey for the first time, they were prompted to answer two qualification questions, one to determine if they are indeed a helping professional, and the other to determine if they are healthy enough for participation.

Recruitment began with a letter sent to organizations personally known to the researcher that employ helping professionals, to obtain management's permission to recruit. Once permission was obtained, a recruitment letter (see Appendix B) was sent to helping professionals at those agencies, as well as to other professionals personally known to the researcher. These organizations included hospitals, schools, colleges, community building organizations, and community mental health organizations located in Western Massachusetts. Specific agencies/organizations that the researcher contacted included the Gill-Montague Regional School District, Massachusetts College of Liberal Arts, the Gill-Montague Community and School Partnership, The Brick House, and other agencies and organizations within Western Massachusetts. Helping professionals at these agencies and organizations were also asked to forward the recruitment letter to other helping professionals not known to the researcher or already informed of the study. Helping professionals were invited to participate in the study through this recruitment letter.

Participants were then directed to the survey web address where they were greeted with a welcome page and then directed to answer screening questions in order to determine their eligibility. Once deemed eligible, they were directed to an informed consent letter, where they had to select "I agree" to become a participant (see Appendix C). After selecting "I agree", they received the instructions for the intervention, they were instructed to print a copy of these instructions. Also, they were reminded of the voluntary nature of this study and that they could choose to withdraw from the study at any time with no repercussions.

This study was not focused on recruiting for diversity and the sample was as diverse as the staff at the organizations in the region. Some areas of western Massachusetts, such as Hampshire and Hamden Counties, are very diverse and therefore, I expected the diversity to be higher. Franklin and Berkshire Counties are less diverse and therefore I expected lower diversity. No demographic data was collected.

This study took place between February 7, 2011 and April 8, 2011. Participants selected a two-week period during which they would like to participate. The only requirement was that they start February 7 or later and ended April 8 or earlier; and could not start after March 28, 2011. Participants were instructed to record their data every working day for two consecutive weeks. They were able to record data for the entire time the survey was open, making it possible for participation longer than the two-week minimum. The first day participants logged onto the survey, they answered questions regarding their job title and years of experience and invented a user name for themselves for tracking purposes using the online survey tool (see Appendix D). They were directed to select a user name that did not compromise their anonymity. Then they rated, at the end of their working hours each working day, their stress before and after the

intervention on a scale from one to five and answered a yes/no question: "Is this a typical day for you?" (see Appendix D).

The mini-yoga intervention was introduced the first time participants logged on to the survey (see Appendix E for the intervention description and instructions). The intervention instructions directed participants to use the intervention at some point during their working shift at their discretion and, by the end of their working hours, rate their perceived stress level before and after the intervention. They were instructed to use the intervention as needed for two full, consecutive working weeks. Participants were expected to complete the daily stress rating questionnaire each working day during the weeks of participation. Instructions regarding what to do if they missed a day of participation were included on the survey. If a participant forgot to complete the survey after the working shift, they were expected to complete it as soon as they were able. For example, if they missed Wednesday's survey, they could complete two surveys on Thursday, one for Wednesday, and one for Thursday.

No narrative or anecdotal data were collected. There were no interviews or personal contact between the participants and the researcher. The data were collected using www.SurveyGizmo.com, an online survey tool. The analysis of the data was done by the researcher with the help of the research analyst at Smith College.

After the survey had concluded, the collected data were downloaded from the survey website as an spreadsheet file. This file, comprised of the raw data collected, was sent to Marjorie Postal, a research analyst at Smith College. Upon receipt of the data, it was organized by anonymous username and then a statistical analysis of the pre- and post-intervention stress ratings was completed, using the statistical analysis program SPSS, the results of which are included in the following chapter.

CHAPTER IV

Findings

At the time the data collection closed, there were 31 participants who recorded data on at least one occasion. Of those participants, eleven (35%) completed the data collection satisfactorily, resulting in eleven participants meeting the criteria for inclusion in the study. A criterion for inclusion was that the participants had to record data for at least 60% of their reported number of working shifts for the two week period. They also had to answer the qualifying questions, questions regarding their work experience, and electronically sign the informed consent letter. During the first log on, participants were asked to report the number of shifts they typically work per week. These eleven participants completed 97 unique data entries (n=97), 78% of the completed data. Twenty-two percent (28 unique entries) of the completed data was discarded because the participants completed the on-line survey fewer than 60% of the days they worked, according to the number of shifts they reported working per week.

The eleven participants of the study all self identify as helping professionals. They are employed as counselors, counseling interns (either social work or psychology), teachers, instructors, directors of counseling centers, social workers, nurse practitioners, and youth workers. Participants reported being employed for between two and 40 years, with a mean of just over 13 years. Participants with 30 or more years of experience comprised 27% of the participants;18% of the participants were those with 10-19 years of experience, and 55% of the participants had five or fewer years of experience. Ten of the participants worked five shifts per week; one worked four shifts per week.

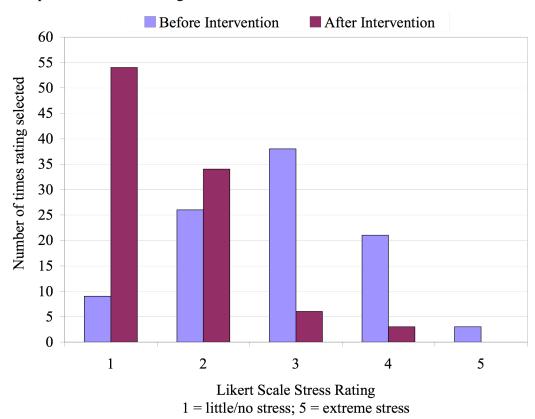
Using a Likert scale of 1-5 with 1 = little or no stress and 5 = extreme stress, the mean stress level of the participants before using the mini yoga intervention was 2.85 (standard deviation= .979, range= 1-5). Using the same Likert scale rating, the mean stress level of participants after using the mini yoga intervention was 1.57 (standard deviation= .749, range=1-4). The mean difference in stress level between pre- and post- intervention rating, was 1.26 (standard deviation= .833, range= 0-3). When asked if their day was a typical day for them, participants reported that 84.5% of the entries were made on typical days, and 15.5% were made on atypical days.

A paired t-test was run to determine if the mean stress rating was significantly different before and after the activity. The major finding, according to the paired t-test analysis, was that there is a significant difference found between the pre- and post-intervention stress ratings (t(96)-14.77, p=0.01, two tailed). This finding supports the hypothesis of this study; a two-minute yoga intervention when used during working hours can reduce helping professionals' perceived stress level. There were 11 discrete participants, which resulted in 97 unique data entries (n=97). The ttest suggests that, with 99% confidence, the mini yoga intervention decreased participants' perceived stress level during working hours in the range of 1.09 and 1.43. This allows the conclusion to be made that there was a significant perceived and measurable decrease in the stress level of the participant. If the study were to be repeated, this researcher expects that there would be a similar reduction in the perceived stress level when comparing pre- and postintervention stress ratings. The mean stress reduction for the whole group of participants is 1.26 points. Participants' mean score on the stress scale before the intervention (m=2.82) and after, on the same scale, the mean score was lower (m=1.57), suggesting a correlation between the yoga intervention and a decreased stress level. Additionally, the low p value of the paired t-test

implies that there is enough evidence to support the hypothesis. It also implies that the difference in the pre- and post- intervention ratings is statistically relevant.

Figure 1.

Comparison of Stress Ratings Before and After the Intervention



The data were also analyzed by examining the stress change score as indicated as a reduced rating on the post-stress Likert scale as compared to the pre-stress rating Likert scale. Examining the 97 unique data entries, 16.5% of the entries reflected no change in the stress rating, 49.5% showed a one point reduction, 25.8% showed a two point reduction, and 8.2% showed a three point reduction on the post-stress rating scale. No participants reported an increase in their perceived stress level. As seen in Figure 1, when comparing the stress rating

before and after the intervention, on average those bars at the high end of the rating scale decreased and those on the low end increased, showing a general trend of lower stress ratings.

The implications of the data supporting the hypothesis are similar to those mentioned in other similar studies. The data also raised questions, and opens the opportunity for more research and for further investigation of the topics in this study. The next chapter will discuss the implications of these findings in greater detail.

CHAPTER V

Discussion

The data reported by the participants supported the hypothesis that a two-minute yoga intervention can decrease the perceived stress level of helping professionals when used during their working hours. This is an important finding because the benefits of an effective stress reduction method are wide reaching. As Edelwich & Brodsky (1980) found in their research, workers who perceive less stress experience an increase in feelings of efficacy in their job responsibilities, improved morale, motivation focus, an improved attitude toward the job while on the job, and a decrease in those feelings that contribute to burn-out and compassion fatigue.

There are several factors that make this study particularly beneficial for helping professionals. The first is that this intervention can be used in relatively little time, affording the helping professional the opportunity to use the intervention throughout their day without feeling like it is an interruption to their work schedule. If the poses are committed to memory they can be performed at any time, in any location, and with little to no interruption to the helping professional's workday. Second, it assists helping professionals to engage in a self-care activity, which has been identified as important in order to help defend against factors that cause burnout (Baker, 2003; Bickley, 1998). Lastly, when helping professionals become less stressed they can be better supports for their coworkers, other helping professionals, and their clientele (Bickley, 1998).

This study was designed to be relatively simple so as not to burden the helping professional participants and so that it could be conducted in the timeframe set by the Smith

College School for Social Work Master of Social Work program. This simplicity meant that the data are focused and relatively few conclusions and implications can be deduced. There is at least one major implication of these data. The two-minute yoga intervention is helpful at reducing the stress level of helping professionals during their working hours. Another factor highlighted by this study is the limited adherence and completion of the study, since the participation level was low—only 35% of participants who signed on at least once completed the two-week data collection—factors other than the length of time may have contributed to the reasons why participants did not follow through with the study, which had been suggested in other studies (Klatt, Buckworth, & Malarkey, 2009; Smith, Hancock, Blake-Mortimer, & Eckert, 2007).

One reason for the low rate of follow through could be that the participants may have forgotten to perform the intervention and record their data. Another reason could be that they may have not found the intervention helpful in reducing their stress level. Some participants that did not follow through with the full two weeks of data collection could have been among the helping professionals that were "too stressed" or "too busy" to engage in "one more" activity during their working hours. It could have seemed overwhelming to perform the intervention and then record the data daily. Finally, it could have been due to not understanding the instructions of the intervention.

To address these issues more contact between the researcher and participants may be beneficial. Teaching or explaining the intervention at the start may provide a way to clear up any confusion, answer questions about when and where to do the intervention, or answer any clarifying questions so that participants feel more connected to the researcher and/or understand the intervention questions better. Additionally, daily reminder emails could be sent to help

participants remember to complete the intervention and record their stress rating for each working shift. Being able to discuss the intervention in person with the researcher and on an ongoing basis may allow for increased participation and compliance. Participants may gain a greater understanding and feel an increased connection to the benefits of the study if explained in direct contact. An increase in direct communication between the researcher and participants may help alleviate the participant's feeling of an increased burden on their time. This increased communication could allow for initial and final interview could be conducted to allow for participants to share their initial concerns and thoughts and then, at the end of the intervention, share the changes they noticed or the difficulties that they were having with the intervention.

If this intervention were conducted in an agency setting, researchers would have an increased amount of time for such contact. Conducting this research in an agency setting would also allow for more flexibility in the confidentially and anonymity requirements. It would also allow for the use of follow up surveys to study if the intervention has a long-term impact.

Researchers could conduct a survey of the participants at regular intervals beyond the initial intervention. The follow up surveys would allow for a deeper understanding of the impact of the intervention and may also suggest some changes that could be made to the intervention to make it more beneficial to helping professionals.

Two other results are implied, but further study and analysis would need to be conducted before they can be fully supported. The first is that this short-term intervention helps professionals of all experience levels decrease stress. The other is that this intervention can help a wide variety of helping professionals (social workers, nurses, teachers, etc) decrease their perceived stress.

The data support the finding that for every one of the helping professionals who participated in the full study, the intervention was effective at reducing their stress level while working. With further study one might determine the causal factors of this reduction. Using the current methodology, the researcher cannot say for certain that the yoga intervention was the direct cause of this stress reduction. The helping professionals could have made the assumption, based on prior knowledge, that yoga is an effective stress reducer and therefore this unconsciously boosted their perception of the stress reduction efficacy of the intervention. The question, "would the intervention work if it were not called yoga?" could be considered for a potential follow up study.

Another possibility is that the intervention allowed for a two-minute change of thinking. The participant had something other than their job related tasks to focus on thereby allowing for a decrease in stress. Another follow up study could examine if a two minute focused break be just as effective as the intervention posed in this study by having two groups; one that engages in the yoga intervention and the other that has a two minute break. The group with the two-minute, unstructured break would serve as the control group. Further, another study could split participants into three groups; one performing the two minute yoga intervention, a second receiving a two minute unstructured break, and a third that uses progressive muscle relaxation for two minutes, as suggested by Ghonchech & Smith's (2004) research. These two suggestions for follow up studies would allow for researchers to explore the causal factors of the intervention's beneficial impact.

Yet another possibility is that the helping professional participants in this study were among those helping professionals that had low stress levels to begin with and had established self-care methods that would have allowed them to relax more quickly and with less effort than

other helping professionals who experience higher stress levels. Determining a baseline stress level before the introduction of the intervention could help determine the degree to which the participants are affected by their perceived stress level. To determine the baseline, a pre- and post- test could be administered during the two weeks before and after the intervention. Having this information would further help the researcher understand the casual relationship of the different factors of this study.

Overall, the results of this study support the hypothesis and offer a promising method of self-care that can be used at anytime a helping professional feels an increased level of stress. This is an important addition to the field of social work for many reasons. One reason is that social workers are often among the most stressed of the helping professions due to low pay, high demands, limited measurable work progress, and few supports. Knowing at least one easy and accessible method to reduce stress, during their working shifts, may offer social workers a practical way of reducing stress. When social workers can reduce their own stress, it allows for them to be more supportive to other staff with whom they work and, most importantly, it increases their availability to their clients. Another contribution this study makes to the field of social work is that it teaches social workers a stress reduction technique they can use with their clients. This intervention is easily accessible for a large number of people; one does not have to be in peak physical condition or regularly practice yoga. All a participant needs is a willingness to decrease their stress level using a method that may be out of their ordinary methods of stress reduction. This makes the intervention proposed in this study accessible to all. Finally, by studying helping professionals, and not specifically focusing on social workers, this study contributes evidence that this intervention can work with other helping professionals with whom social workers are sometimes required to regularly interact. Since helping professionals are

tasked with assisting all members of our community and society everyone benefits from having helping professionals who are actively managing the impact stress has on their work.

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Appendix A

Human Subjects Review Committee Approval Letter



Smith College Northampton, Massachusetts 01063 T (413) 585-7950 F (413) 585-7994

January 28, 2011

Sheila Thorn

Dear Sheila,

Your final set of revisions has been reviewed and all is now in order. We are now able to give final approval to your study. You don't really have to put all that on the welcome page as it repeats much of what they will see on the Consent. You can just say welcome, say in a sentence what the study is, and thank them for their interest and then ask the eligibility questions. It's up to you. If you do make any changes in that page, just send it to Laurie Wyman for your permanent file so it will be complete.

Please note the following requirements:

Consent Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project. It is ambitious and I hope you are able to recruit a good group of participants.

Sincerely,

Ann Hartman, D.S.W.

Chair, Human Subjects Review Committee

an Hartnen / Mw

CC: Michael Murphy, Research Advisor

Appendix B

Recruitment Letter

Dear Helping Professional:

My name is Sheila Thorn and I am a graduate student conducting research for a master's thesis at the Smith College School for Social Work. This research will explore the impact of a mini-yoga intervention on the stress levels of helping professionals (and students working towards a degree in the helping professions), during their working hours.

I would be grateful if you would be willing to participate in this three-week study. It will take approximately five minutes of your working day (two minutes for the intervention and three minutes to complete the daily survey). The mini-yoga intervention consists of four basic yoga poses and a deep breathing exercise.

If you are willing to participate in this survey, I ask that you are a professional in a helping profession or are a student from an accredited program who is working in a clinical internship within the helping profession. For the purpose of this study "helping professional" is defined as a profession that is directly tasked with assisting others improve their mental and/or physical health either through educational, physical or psychological interventions.

To reach this survey, please click on or enter the following link into your preferred web browser: *link provided in actual letter to participants*

Upon clicking on this link you will be directed to a welcome page with further instructions.

Your anonymity and confidentiality is maintained by using a third source, SurveyGizmo.com, while completing the daily surveys. Further assurances about confidentiality will be available in an informed consent letter should you proceed with the survey.

Thank you for your time and consideration. If you have any questions or concerns, please contact me at, sthorn@smith.edu or the Smith College School for Social Work Human Subjects Review Committee.

Sincerely, Sheila Thorn

Appendix C

Informed Consent Letter

Dear Participant,

My name is Sheila Thorn and I am a graduate student in Smith College's School for Social Work program. I am exploring the effect of introducing a mini-yoga intervention during working hours on the perceived stress level of helping professionals. The results of this research will be used for my Thesis, and for possible presentation and publication.

I am asking for helping professionals to participate in two-week study. The study will involve the learning of some simple yoga exercises that you can do while at work. You will be asked to record your stress level each working day, do an exercise for approximately two minutes per working shift, and, finally, record your stress level at the completion of each work shift over a period of to weeks. To participate in this study you must be a professional in a helping profession or are a student from an accredited program who is working in a clinical internship within the helping profession. For the purpose of this study "helping professional" is defined as a profession that is directly tasked with assisting others improve their mental and/or physical health either through educational, physical or psychological interventions. I also ask that you are in good health and can perform basic stretching and breathing exercises. Before agreeing to participate, please, determine whether you are healthy enough for these basic stretching and breathing exercises.

There are minimal risks in participating in this survey due to the stretching and breathing exercises you will be performing. The main benefit of participating in this study is that you will learn a quick and easy self-care method that you can use throughout your workday. The result will be used to add to the knowledge base of self-care methods available to helping professionals. The result will also be used to aid helping professionals in reducing their on the job stress level thereby reducing the risks associate with being highly stressed. Unfortunately I won't be able to pay you for your participation in this study.

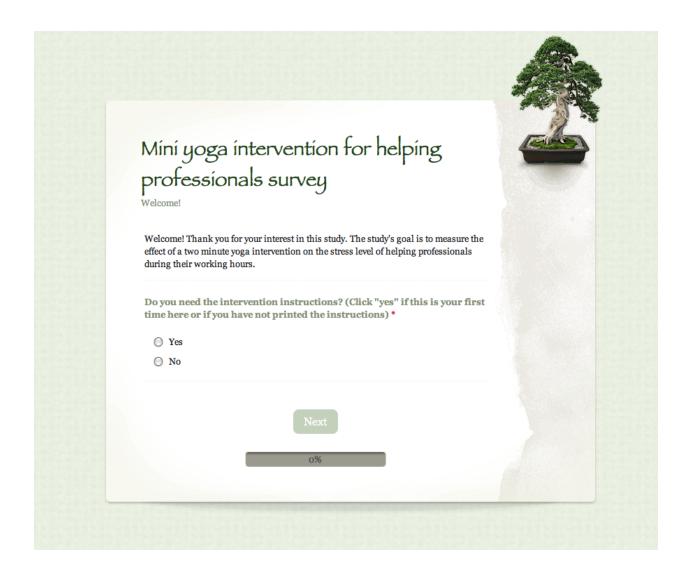
This is a confidential and anonymous survey. No identifying information collected. As a participant you will be asked to invent a user name, for tracking purposes only, that does not and cannot be used to identify you in any way. My research advisor and a research analyst, who will help analyze the results of the survey, will have access to the results after all user names are removed. The results will not include participant user names. The data will be presented as a whole in publication and in presentations. All survey results will be kept in a secure location for three years as required by Federal guidelines. After this period of time, the survey results will be kept secure until I no longer need them, at which time they will be destroyed.

Your participation is voluntary. You may withdraw your participation at any time without penalty. You may stop the exercises or refuse to answer any questions for any reason. Data from participants who complete at least two weeks of the survey will be the only data used in the analysis of the survey. Participants who withdraw, stop recording their data on the survey before

| two weeks of participation, will not be included in the final analysis of the data. If you would like to contact the researcher, please email, sthorn@smith.edu or call with any questions or comments. If you have any question about your rights or about any aspect of this study, contact me or the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974. | | |
|--|--|--|
| BY SELECTING "I AGREE" YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION AND THAT YOU HAVE HAD THE OPPORTUNTIY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY. | | |
| Please print and keep a copy of this informed consent letter for your records. | | |
| Thank you for your time and consideration. Please contact Sheila Thorn if you have any questions, sthorn@smith.edu or | | |

Appendix D

Survey







Print these instructions.

During your working hours, notice your stress level. At a time of your choosing, during your working hours, use the mini-yoga exercise as described below. Then, notice your stress level as you carry out your work related responsibilities after doing the mini-yoga exercise. When it is convenient, during your working hours, log on to the survey to rate your stress before and after using the mini-yoga exercise and to report if your day was a typical work day for you.

The following is the yoga intervention to be used during your work shift. It will take approximately two minutes to complete. The yoga poses can be performed sitting or standing. READ THE DIRECTIONS FULLY BEFORE PERFORMING THE YOGA EXERCISES.

Breathing exercise:

Begin by gently closing your eyes. Inhale deeply, expanding your lungs and belly fully, focusing your attention on the cold sensation in your nostrils. Exhale completely, allowing your belly and lungs to fall flat, focus your attention on the warm sensation in your nostrils. Keep your focus tuned to the temperature change in your nostrils.

After the third deep breath, allow your breath to return to normal.

If you feel dizzy or lightheaded, at any point, let your breath return to normal,

· Four Phases of the Moon:

Four rmases of the amon:

Sitting-Place your feet flat on the floor. Inhale your arms over your head, elbows straight, sit up straight, engage abdominal muscles. Keeping your sitting bones attached to the seat, on your next inhale, laterally bend to the right, exhale come back to center, inhale bend back keeping your sitting bones attached to the seat, exhale come to center, inhale bend to the seat, exhale come back to center. Exhale your

Standing-Inhale your arms over your head, elbows straight, stand with a neutral spine, engage abdominal muscles. On your next inhale, laterally bend to the right, exhale come back to center, inhale bend to the left, exhale come to center, inhale bend back do not collapse into your lower back, only slightly bend back, exhale come to center, inhale bend forward, exhale come back to center. Exhale your arms down.

Your arms and shoulders will follow your breath, when you inhale your arms and shoulders will open with the expanding of your lungs. When you exhale, your arms and shoulders will close with the emptying of your lungs.

Inhale deeply, arch your back allowing your chest and belly to stick out and expand fully. Bring your shoulder

Exhale fully, round your back allowing your lungs and belly to sink fully. Round your shoulder drawing them

The inhalation and exhalation poses will flow into each other and are performed together. Repeat three times each.

· Leg Stretches:

Sitting-Sit with a neutral spine. Point your toes bringing your legs as close to parallel with the floor as you can. Point and flex your feet three times.

Then, roll your ankles in one direction three times, in the other direction three times

 $Lastly, let your legs \ relax. \ Flex \ your feet. \ Draw \ one leg \ up \ so \ that \ it \ is \ parallel \ to \ the \ floor, foot \ flexed. \ Repeat \ both$

Standing-Stand with a neutral spine. Point your toes bringing your legs as close to parallel with the floor as you can. Point and flex your feet three times.

Then, roll your ankles in one direction three times, in the other direction three times.

Lastly, let your legs relax. Draw one leg up so that it is parallel to the floor, foot flexed. Repeat both sides three

· Full Body Stretch:

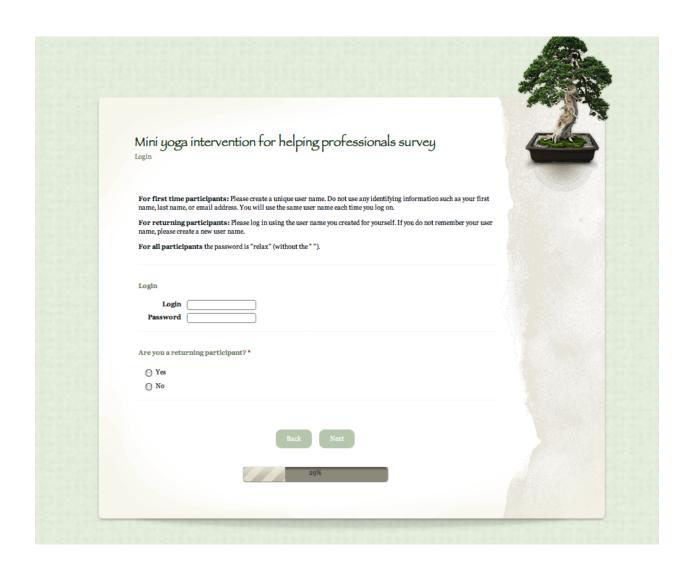
Sitting-Inhale arms up, point your toes, bring legs parallel to the floor, reach up through your fingers, engage abdominal muscles, maintain a neutral spine. Exhale, bring arms down, relax legs and feet.

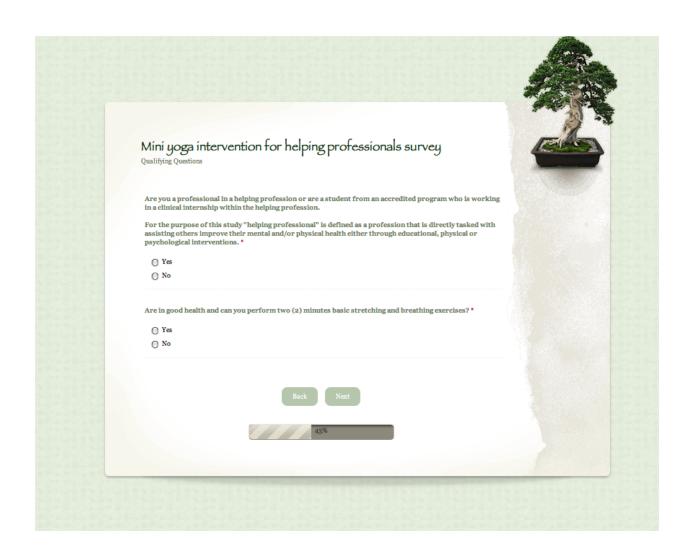
Standing-Inhale arms up, come up on to your toes, reach up through your fingers, engage abdominal muscles, maintain a neutral spine. Engage all of your major muscles. Exhale, bring arms down, relax legs and feet.

Breathing exercise:

For the last exhale, exhale forcefully. Then allow your breath to return to normal.

Repeat the above yoga practice as needed.





Mini yoga intervention for helping professionals survey Dear Participant, My name is Sheila Thorn and I am a graduate student in Smith College's School for Social Work program. I possible presentation and publication.

am exploring the effect of introducing a mini-yoga intervention during working hours on the perceived stress level of helping professionals. The results of this research will be used for my Thesis, and for

I am asking for helping professionals to participate in two-week study. The study will involve the learning of some simple yoga exercises that you can do while at work. You will be instructed to record your stress level each working day, do an exercise for approximately two minutes per working shift, and, finally, record your stress level at the completion of each work shift over a period of to weeks. To participate in this study you must be a professional in a helping profession or are a student from an accredited program who is working in a clinical internship within the helping profession. For the purpose of this study "helping professional" is defined as a profession that is directly tasked with assisting others improve their mental and/or physical health either through educational, physical or psychological interventions. I also ask that you are in good health and can perform basic stretching and breathing exercises.

There are minimal risks in participating in this survey due to the stretching and breathing exercises you will be performing. The main benefit of participating in this study is that you will learn a quick and easy self-care method that you can use throughout your workday. The result will be used to add to the knowledge base of self-care methods available to helping professionals. The result will also be used to aid helping professionals in reducing their on the job stress level thereby reducing the risks associate with being highly stressed. Unfortunately I won't be able to pay you for your participation in this study.

This is a confidential and anonymous survey. No identifying information collected. As a participant you will be instructed to invent a user name, for tracking purposes only, that does not and cannot be used to identify you in any way. My research advisor and a research analyst, who will help analyze the results of the survey, will have access to the results after all user names are removed. The results will not include participant user names. The data will be presented as a whole in publication and in presentations. All survey results will be kept in a secure location for three years as required by Federal guidelines. After this period of time, the survey results will be kept secure until I no longer need them, at which time they will be

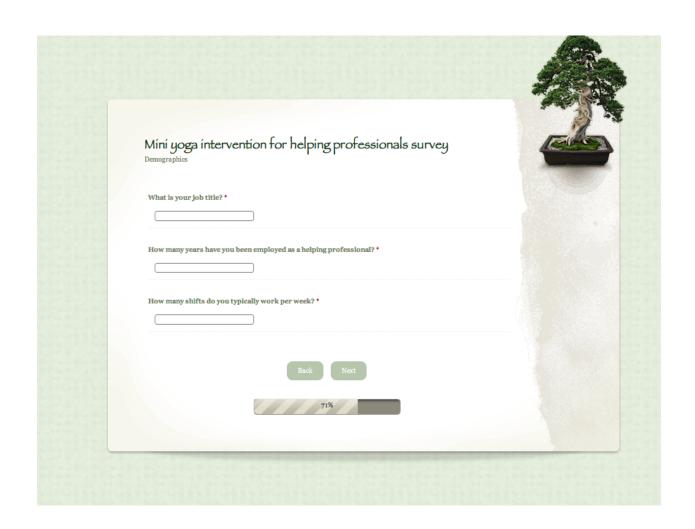
Your participation is voluntary. You may withdraw your participation at any time without penalty. You may stop the exercises or refuse to answer any questions for any reason. Data from participants who complete at least two weeks of the survey will be the only data used in the analysis of the survey. Participants who withdraw, stop recording their data on the survey before two weeks of participation, will not be included in the final analysis of the data. If you would like to contact the researcher, please email, sthorn@smith.edu or call (413) 768 -9108 with any questions or comments. If you have any question about your rights or about any aspect of this study, contact me or the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

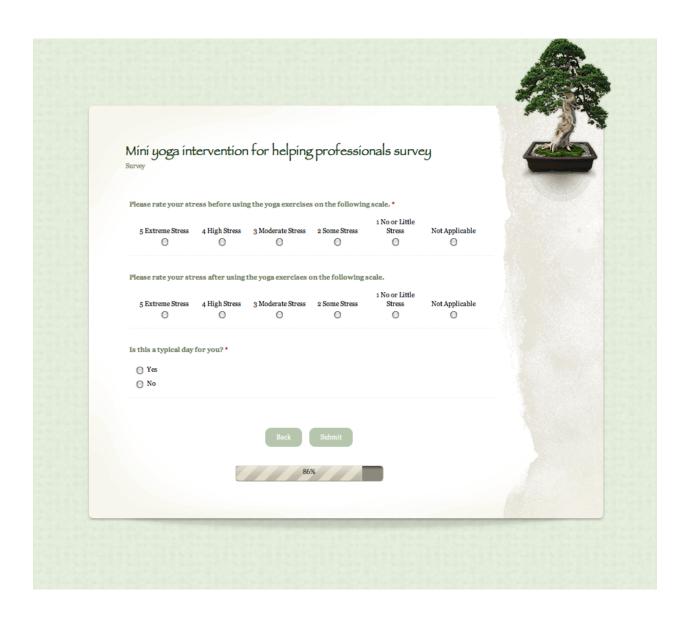
BY SELECTING "I AGREE" YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION AND THAT YOU HAVE HAD THE OPPORTUNTLY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE

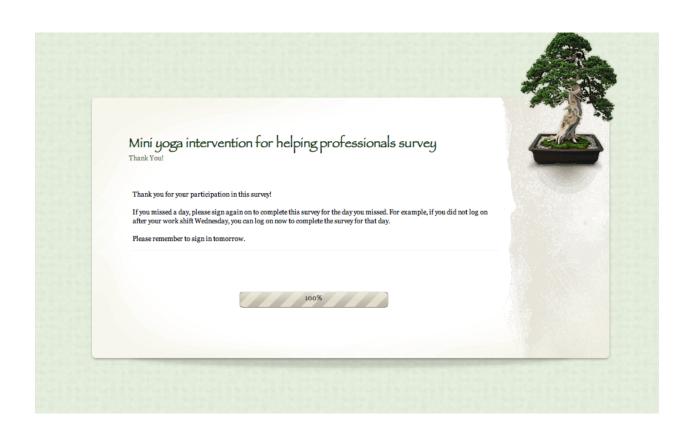
Please print and keep a copy of this informed consent letter for your records.

Thank you for your time and consideration. Please contact Sheila Thorn if you have any questions, sthorn@smith.edu or (413) 768 -9108.

 ☐ I agree I do not agree







Appendix E

Intervention Instructions

Print these instructions.

Study Instructions:

During your working hours, notice your stress level. At a time of your choosing, during your working hours, use the mini-yoga exercise as described below. Then, notice your stress level as you carry out your work related responsibilities after doing the mini-yoga exercise. When it is convenient, during your working hours, log on to the survey to rate your stress before and after using the mini-yoga exercise and to report if your day was a typical work day for you.

The following is the yoga intervention to be used during your work shift. It will take approximately two minutes to complete. The yoga poses can be performed sitting or standing. READ THE DIRECTIONS FULLY BEFORE PERFORMING THE YOGA EXERCISES.

Breathing exercise

Begin by gently closing your eyes. Inhale deeply, expanding your lungs and belly fully, focusing your attention on the cold sensation in your nostrils. Exhale completely, allowing your belly and lungs to fall flat, focus your attention on the warm sensation in your nostrils. Keep your focus tuned to the temperature change in your nostrils. Repeat this three times.

After the third deep breath, allow your breath to return to normal. If you feel dizzy or lightheaded, at any point, let your breath return to normal.

| E DI C.1 | G**** | C/ 1' |
|--------------------|------------------------------------|------------------------------------|
| Four Phases of the | Sitting | Standing |
| Moon | Place your feet flat on the floor. | Inhale your arms over your |
| | Inhale your arms over your | head, elbows straight, stand |
| | head, elbows straight, sit up | with a neutral spine, engage |
| | straight, engage abdominal | abdominal muscles. On your |
| | muscles. Keeping your sitting | next inhale, laterally bend to the |
| | bones attached to the seat, on | right, exhale come back to |
| | your next inhale, laterally bend | center, inhale bend to the left, |
| | to the right, exhale come back | exhale come to center, inhale |
| | to center, inhale bend to the | bend back do not collapse into |
| | left, exhale come to center, | your lower back, only slightly |
| | inhale bend back keeping your | bend back, exhale come to |
| | sitting bones attached to the | center, inhale bend forward, |
| | seat, exhale come to center, | exhale come back to center. |

| | inhale bend forward, exhale come back to center. Exhale your arms down. | Exhale your arms down. | |
|-------------------|--|--|--|
| Cat/Cow | Your arms and shoulders will follow your breath, when you inhale your arms and shoulders will open with the expanding of your lungs. When you exhale, your arms and shoulders will close with the emptying of your lungs. | | |
| | Inhale deeply, arch your back allowing your chest and belly to stick out and expand fully. Bring your shoulder blades together. | | |
| | Exhale fully, round your back allowing your lungs and belly to sink fully. Round your shoulder drawing them together in the front. | | |
| | The inhalation and exhalation poses will flow into each other and are performed together. | | |
| | Repeat three times each. | | |
| Leg Stretches | Sitting Sit with a neutral spine. Point your toes bringing your legs as close to parallel with the floor as you can. Point and flex your feet three times. Then, roll your ankles in one direction three times, in the | Standing Stand with a neutral spine. Point your toes bringing your legs as close to parallel with the floor as you can. Point and flex your feet three times. Then, roll your ankles in one direction three times, in the | |
| | other direction three times. Lastly, let your legs relax. Flex your feet. Draw one leg up so that it is parallel to the floor, foot flexed. Repeat both sides three times. | other direction three times. Lastly, let your legs relax. Draw one leg up so that it is parallel to the floor, foot flexed. Repeat both sides three times. | |
| Full Body Stretch | Sitting | Standing | |
| y | Inhale arms up, point your toes, bring legs parallel to the floor, reach up through your fingers, engage abdominal muscles, maintain a neutral spine. Exhale, bring arms down, relax legs and feet. | Inhale arms up, come up on to your toes, reach up through your fingers, engage abdominal muscles, maintain a neutral spine. Engage all of your major muscles. Exhale, bring arms down, relax legs and feet. | |

| Breathing exercise | See instructions above. | |
|--------------------|---|--|
| | For the last exhale, exhale forcefully. Then allow your breath to return to normal. | |

Repeat the above yoga practice as needed.