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# Teaching Mindfulness Techniques to Nursing Students for Stress Reduction and Self-care

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TEACHING MINDFULNESS TECHNIQUES TO NURSING STUDENTS FOR STRESS  
REDUCTION AND SELF-CARE

A Systems Change Project submitted in partial fulfillment of the requirements for the Doctor of

Nursing Practice Degree

St. Catherine University

St. Paul, Minnesota

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This is to certify that I have examined this Doctor of Nursing Practice systems change project  
written by

Lisa R. Shields

And have found that it is complete and satisfactory in all respects, and that any and all revisions  
required by the final examining committee have been made.

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Faculty Project Advisor

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Date

DEPARTMENT OF NURSING

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### **Executive Summary**

This systems change project (SCP) was participatory action research based on a mindfulness intervention/teaching for reduction of stress and promotion of self-care in nursing students. The project was conducted at St. Catherine University as part of the Doctor of Nursing Practice program. Participants were twenty senior post-baccalaureate nursing students in their final semester of study. Research was conducted by the writer and consisted of two, 1 hour mindfulness interventions. Data were collected using the Perceived Stress Scale and Mindfulness Attention Awareness Scale and analyzed using statistical hypothesis tests. Qualitative data was also collected. Results of the project were not statistically significant. Although no conclusions can be drawn from this SCP based on the data and small number of participants, valuable insights were gained. Based on the qualitative data, participants supported the use of mindfulness for stress reduction and found value in learning a technique for stress reduction.

## Chapter 1

### Background

All human beings are part of a greater whole. When one person is affected, all of humanity is affected. These effects can be either positive or negative. Nursing is a profession that understands wholism and looks at individuals holistically. As caregivers, it is essential for nurses to care for themselves in order to give fully to those they serve. Unmanaged stress can adversely affect the caring process. Students of nursing appear to experience an increased level of stress. Management of stress is a tool that is invaluable to the profession of nursing. According to Prymachuk (as cited in American Holistic Nurses Association [AHNA], 2009), “one third of nursing students experience stress severe enough to induce mental health problems such as anxiety and depression.” Although this has been the trend, it does not need to continue. Teaching mindfulness techniques to nursing students may be one way to help nursing students manage stress.

Mindfulness techniques have been cited in the literature as effective tools for reducing stress and anxiety in undergraduate nursing students (Moscaritolo, 2009; Kang, Choi, & Ryu, 2009). Mindfulness is moment to moment awareness (Kabat-Zinn, 1990). Mindfulness is presence. Mindfulness is awareness. One can be mindful at any time and while doing any activity. For example, one is being mindful when taking a moment to pause for a deep breath or when feeling the beat of music. Throughout life, there are many times when we operate on auto pilot. We are only partially conscious, often not in the moment. Being partially conscious runs the risk of missing some of the most precious experiences of life and missing the importance of making eye

contact, of touching, and of being in your own body (Kabat-Zinn, 1990). Being present and fully aware are essential skills for nurses.

Because nursing students experience much stress, an ever growing body of literature regarding the stresses of nursing supports the need to include stress management education in curricula (Beddoe & Murphy, 2004). Nursing curricula is filled with the necessary elements of preparing competent nurses. This presents the challenge of including yet another component into nursing curriculum. Although this is a challenge, over-coming this challenge is a must. The need for stress management techniques for nursing students is necessary to prevent burnout and also to prevent nurses from leaving the profession. The stress that student nurses carry can only be of harm to the profession in the long-term (O'Regan, 2005).

The objective of this Systems Change Project (SCP) was to develop a program for teaching mindfulness techniques to reduce stress and increase self-awareness in nursing students, and to evaluate the program's effects.

### **Problem Statement, Research Question, and Hypothesis**

Student nurses experience high levels of stress. According to Beddoe & Murphy (2004), nursing students report very high stress levels that are at times higher than those of students in other health professions. Nursing students have attributed stress to academic, financial, employment, and interpersonal circumstances (Beddoe & Murphy, 2004). This stress may affect performance and ability to care for patients and self. Inability to cope with increased stress may be caused by many factors; one factor may be ineffective coping skills and/or even a genetic predisposition to the ill effects of stress. The goal of this SCP is to provide nursing students with mindfulness techniques for stress reduction. The research question was as follows: Does a brief



mindfulness intervention for stress reduction decrease stress in post-Baccalaureate nursing students? The hypothesis was that students will report decreased levels of stress after instruction on and practice of mindfulness techniques.

## Chapter 2

### Theoretical sources

This SCP was guided by Margaret A. Newman's theory of *health as expanding consciousness* (2004), the *Code of Ethics for Holistic Nurses*, and by the principles of *Catholic social teaching*.

### Theoretical framework

The theory that guides this SCP is Margaret Newman's *health as expanding consciousness*. This theory was chosen because of its focus on the unitary whole of all persons, on the value of relationships, and the importance of pattern recognition. The theory supports the idea that the nurse needs to be fully present within the nurse-client relationship. The essence of the theory is being fully present in the transformation of our self and our clients as meaning is searched for in the lives of persons who have come to critical junctures (Newman, 2008). Unfortunately, in nursing school, much emphasis is placed on the tasks associated with nursing and the quality of the nurse-client relationship is often neglected. Although these tasks are essential parts of the nursing process, the essence of nursing goes beyond these tasks and transcends these tasks. The theory of *health as expanding consciousness* uses pattern recognition to find meaning in the disease process. "To see health as the pattern of the whole, we need to see disease not as a separate entity that invades our bodies but as a manifestation of the evolving pattern of person-environment interaction (Newman, 1999, p. 17)."

Newman's theory stresses the importance of being mindful. This means being fully present. To be fully present means that one is completely in the moment without distraction. Being fully present is essential to a transforming relationship (Newman, 2008). A transforming relationship brings meaning to the experience and expands consciousness. The practice of mindfulness is one

tool to bring presence to the nurse-client relationship and *health as expanding consciousness* is the theory that supports this tool.

### **Ethical framework**

The ethical framework shaping this SCP was the *Code of Ethics for Holistic Nurses*. The code states that nursing care should be given within a context mindful of the holistic nature of humans, understanding the body-mind-spirit connection (American Holistic Nurses Association, n.d.). The nurse views the client as a whole person, not individual parts. This also means recognition of the impact of the environment on the client. The nurse enters into a relationship with the client that is guided by respect and a desire for growth and development (n.d.). The *Code of Ethics for Holistic Nurses* also stresses the importance of care for all persons. Nursing care is unrestricted by considerations of nationality, race, creed, color, age, sex, sexual preference, politics, or social status (n.d.). Clients are active participants in their own care. The nurse is to be a role model, not only teaching health behaviors, but also living them.

### **Social Justice Framework**

This Systems Change Project promoted social justice by adhering to the *Key Principles of Catholic Social Teaching* (Office for Social Justice, 2006). This SCP supported those who are the most vulnerable, those who did not have the skills to effectively manage stress, or who had multiple layers of significant stress and trauma. These are the persons who are the most vulnerable to the detrimental effects of unmanaged stress as they lack the resources to manage stress. When the most vulnerable are served, society, as a whole, benefits. As nurses it is our ethical duty to address the known stress that nurses face and to explore tools to help manage this stress.

This SCP also strived to maintain human dignity. Everyone is a child of God. Everyone is entitled to be treated fairly. The goal of this SCP is to teach mindfulness. To be present and mindful is to be able to see the truth that each human being is a reflection of God. Catholic Social Teaching reminds us to be aware of the beauty of life.

### **Literature Review and Synthesis**

Literature searches were conducted using Medline, CINAHL, and the National Guideline Clearinghouse database. Dates of publications searched were from any date to the present. The key phrase used was “teaching mindfulness to nursing students.” There were limited numbers of studies addressing both stress and mindfulness in the nursing population. Of this limited number of studies, a majority of articles addressed stress and mindfulness in the nursing population currently in practice, but did not address the target population of nursing students. A total of five studies were identified that directly applied to the area of study and the population. For each article of the literature search the following areas were analyzed and placed into Table 1: design, purpose, participants, outcome measures, results, and author’s conclusions/discussion.

Kany, Choi, and Ryu (2009) studied female junior and senior nursing students in one university in Korea. Their areas of expertise are medicine and nursing. No conflicting agendas were noted. Background information regarding stress and mindfulness was included. No specific research question was stated. Males were omitted from this study. Participants were informed of the study prior to participation. There is no indication if data were encoded and there is no indication of Institutional Review Board (IRB) approval. The study was a pretest-posttest design. A convenience sample of 32 participants was used and the participants were randomly divided into an experimental group of 16 participants and 16 control. Questionnaires

where used to collect information. The experimental group participated in an eight-week stress coping program based on mindfulness. The results of the study were a decrease in stress and a decrease in anxiety in the experimental group. This study supports the use of mindfulness techniques with nursing students to reduce stress and anxiety.

Beddoe and Murphy (2004) looked at whether mindfulness decreased stress and fostered empathy among nursing students. Background information on empathy and mindfulness for stress reduction is provided. The group studied was baccalaureate nursing students aged 20-39 years who were all women and had no previous mindfulness experience. A convenience sample of 23 nursing students volunteered for participation in an eight-week mindfulness course which included a body scan, sitting meditation, and yoga. Of the 23 nursing students that volunteered, 16 completed the study. No reason for dropout noted. There is no indication if data were encoded and there is no indication of IRB approval. The study was a pretest-posttest design. The study did not include a control group. Questionnaires were used to collect pretest and posttest data. The findings of the study were that participation in the intervention reduced student's anxiety. Data indicate that mindfulness techniques may reduce anxiety in nursing students.

Young, Bruce, Turner, and Linden (2001) studied the effects of mindfulness techniques on stress level in third year nursing students. The authors' areas of expertise are nursing and psychology. The authors teach and practice in Canada. The purpose of the study was to evaluate effectiveness of the program in reducing stress. Background information about the effects of stress on students and Mindfulness Based Stress Reduction (MBSR) is included. The third year nursing students were invited to participate in the intervention during a verbal, in-class presentation. The sex and age of the participants were not noted. IRB approval was obtained

and authors note that steps were taken to assure confidentiality. A convenience sample of 30 was used, with 15 in the experimental group and 15 in the control group. Focus groups and questionnaires were used to collect data. The focus groups were taped and transcribed and analyzed by the researchers and students. Findings suggest that mindfulness was empowering to students to help manage stress (Young et al., 2001).

Several themes emerged from the literature review. The first theme was that stress is indeed prevalent in nursing students. Rella, Winwood, and Lushington (2008) found that up to 20% of nursing graduates were reporting serious unmanaged fatigue and stress.

The second theme that emerged was the use of Jon Kabat-Zinn's *Mindfulness Based Stress Reduction* (MBSR) techniques as a mindfulness intervention for nursing students. Of the five articles addressing nursing student participants, three cited using Kabat-Zinn's MBSR techniques for the interventions (Beddoe & Murphy, 2004; Poulin et al., 2008; Shirey, 2007).

The final theme that emerged was the need for the implementation of stress reduction techniques into the nursing curriculum. Although this may seem an impossible task to add more to the nursing curriculum, even a brief MBSR intervention showed significant benefit on life satisfaction and relaxation (Poulin et al., 2008).

The literature review supported mindfulness and MBSR techniques as an effective technique in stress reduction for nursing students.

Table 1: Literature Review and Synthesis

TITLE	AUTHORS AND COUNTRIES	DESIGN	PURPOSE	PROCEDURE	PARTICIPANTS	OUTCOME MEASURES	RESULTS	CONCLUSION/DISCUSSION
An Evidenced Based Solution for Minimizing Stress and Anger in Nursing Students	Shirey (2007) United States	Background and discussion of other studies	Summarize the teaching-learning issue of anger and to discuss Mind Body Stress Reduction (MBSR) as an evidenced based solution	View of 4 previous MBSR studies with nursing students and nurses	N/A	N/A	N/A	Teaching mindfulness may facilitate positive student management of stress and anger; Schools of nursing could incorporate MBSR by integrating mindfulness tools into existing courses or by development of informal groups; Teaching mindfulness may be of lasting advantage in practice and in the retention of nurses
Does Mindfulness Decrease Stress and Foster Empathy Among Nursing Students?	Beddoe and Murphy (2004) United States	Pre-test/post-test design without control group	To provide students with tools to cope with stress and to increase empathy through interpersonal learning	8 week researcher led course following MBSR guidelines developed by Kabat-Zinn	16 baccalaureate nursing students	Derogatis Stress Profile; Interpersonal Reactivity Index (IRI); Positive Attitude and Behavior Post-test	75% of participants found breath awareness of benefit in stressful situations; 75% of participants reported increased self-confidence;	Participants who meditated had the greatest benefit; Future research should investigate integration of mindfulness training in nursing curriculum and to follow the students during their studies and beyond to assess benefits; Mindfulness may reduce anxiety and the taking on of others emotions
The Effectiveness of a Stress Coping Program Based on Mindfulness Meditation on the Stress, Anxiety, and Depression Experienced by Nursing Students in Korea	Kang, Choi, and Ryu (2009) Korea	Convenience sample and control group using pre-post test design	Investigation of the effects of a mindfulness based stress reduction program on stress, anxiety, and depression	8 weekly 90 minute sessions of stress-coping program based on mindfulness meditation; Participants were taught body scan and various forms of meditation	41 junior and senior nursing students	Stress measured by Psychosocial Wellbeing Index form developed by Chang	Participants showed significantly reduced stress level, while there was an increase in stress level of the control group; Decreased overall stress scores	Stress-coping program based on mindfulness meditation is effective in decreasing stress and anxiety in nursing student
Interventional Strategies to Decrease Nursing Student Anxiety in the Clinical Learning Environment	Moscaritolo (2009) United States	Literature review	To provide clinical nursing faculty with current literature related to humor, peer mentors, and mindfulness training to decrease undergraduate student nurse anxiety	Databases used not listed; 3 studies reviewed.	N/A	N/A	Literature suggests that mindfulness training is an effective tool to decrease anxiety in undergraduate nursing students;	Empirical studies are needed to examine the effect of interventional strategies on student's anxiety in the clinical setting in regards to skill development, performance, and retention

### Chapter 3

#### Project Summary

This SCP was to introduce a brief mindfulness intervention to senior post-baccalaureate nursing students. The techniques taught were those developed by Jon Kabat-Zinn (1990). His MBSR (mindfulness-based stress reduction) program is supported in the literature for stress reduction.

Kabat-Zinn's formal program is taught as an eight week program for 2.5 hours per week (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2004). Although this intervention was not as extensive as the formal MSBR program by Kabat-Zinn, MSBR techniques have been found to also be of benefit in brief interventions (Poulin, Mackenzie, Soloway, & Karayolas, 2008; Mackenzie, Poulin, & Siedman-Carlson, 2006).

The SCP began in September 2010 and lasted until December 2010. The Perceived Stress Scale and the Mindfulness Attention Awareness Scale (MAAS) were administered prior to the first intervention/teaching session. The first intervention session began with an introduction to and history of mindfulness. The first mindfulness techniques taught were breath work/sitting meditation and the bodyscan. The participants were asked to practice 10 minutes, 5 days per week and to record any insights in a journal. The journal was personal use only and not for research purposes.

During the final intervention in December 2010, the participants were asked to identify any barriers to practicing mindfulness techniques and note the frequency of their use of the



mindfulness techniques. Questions and concerns were discussed. Breathwork/sitting meditation and the bodyscan were reviewed. Yoga was the final mindfulness tool taught during this final session. The postures taught were those to lessen anxiety and depression. The participants were asked to continue to use mindfulness techniques for at least 10 minutes per day throughout the remaining school year. Journal use was reinforced. The Perceived Stress Scale and MAAS were administered after the final intervention/teaching session and participants were asked to submit hand written comments regarding this SCP for use as qualitative data.

Minimal resources were needed to carry out the project. Classroom instruction was done using a power point and handouts. Participants were given a copy of the instructions. Journals were given to the participants to record any thoughts or insights. Survey Monkey was used for survey administration and data collection. Volunteers from Macalester College were used for data analysis. There were no outside sources of funding.

**Project Aim.** The project investigated the benefit of mindfulness techniques in nursing students for stress reduction and self-care. It was hypothesized that students would show a decrease in stress after learning and implementing mindfulness techniques.

**Project Design.** This SCP used an action research approach with an intervention group only. Quantitative and qualitative data collection methods were used. Quantitative data were collected to evaluate statistical significance of the data findings. Qualitative data were collected to evaluate the experience of the participants. Qualitative data were also collected because of the small number of participants in this SCP and the possibility of type two error. The intervention group consisted of 20 post-baccalaureate nursing students at St. Catherine

University. The intervention consisted of two, 1 hour sessions that taught mindfulness techniques for stress reduction including breathwork/sitting meditation, the body scan, and yoga. The classes were taught by the researcher who has studied and practiced MBSR for over three years. The intervention also briefly discussed Margaret Newman's theory of *health as expanding consciousness* (2004) to link nursing theory to the practice of mindfulness. This was done to help maintain theoretical fidelity throughout the project.

**Participants.** A total of 20 post-baccalaureate nursing students in their final semester of their nursing program participated in the project. Amongst the students, 4 were male and 16 were female.

**Ethical Considerations.** Ethical consideration inherent in this project is to "do no harm". IRB approval was obtained. The participants were informed of the purpose of the project. Participation was part of the curriculum, but completion of the pre and post-test survey was voluntary. The survey was administered via Survey Monkey to keep the results and participants confidential. Participants were also asked to write an evaluation of the project without using their names.

**Evaluation Plan.** Quantitative evaluation of this SCP was done by use of the Perceived Stress Scale and the MAAS (see Appendices A and B for complete surveys). The use of these surveys was supported by the literature review. The Perceived Stress Scale and MAAS were administered in September 2010 and December 2010. The data were collected by the researcher via Survey Monkey and was analyzed by two assistant professor volunteers at Macalester College with PhD degrees in statistics and the researcher. Qualitative data were collected by asking the participants to write down any thoughts about this SCP after the interventions were completed.

**Project Surveys.** Project surveys were administered via an email link to Survey Monkey. A pre-test was administered before the first intervention and a post-test was administered after the final intervention. The Perceived Stress Scale and the Mindfulness Attention Awareness Scale (MAAS) were utilized for data collection. The Perceived Stress Scale was used to measure the level of stress experienced by the participants during different life situations. There are 10 questions on the Perceived Stress Scale and each question is rated by a 5-point Likert format ranging from 0=never to 4=very often. The Mindfulness Attention Awareness Scale was used to measure the level of mindfulness experienced by the participants on a day-to-day basis. There are 15 statements on the MAAS and each question is rated by a 6-point Likert format ranging from 0=almost always to 5=almost never.

## Chapter 4

### Data Analysis

Statistical hypothesis tests were performed on the survey outcomes. Each question was tested for significant changes in the mean responses from the before the intervention to the after the intervention survey. Since participant responses were not linked or paired to each survey, a two-sample t-test was performed for each response. Survey participants before the intervention were n=14 and after the intervention n=9. The p-value was set at 0.05.

### Results

Pre and post-intervention scores are shown in Table 2. Questions 1 thru 15 correspond to the MAAS and questions 16 thru 25 to the Perceived Stress Scale. No statistically significant difference was noted pre versus post intervention. P-values ranged from 0.06-0.99.

Table 2: Comparison of Results Pre and Post-Intervention

Question	mean before	mean after	difference in means(after - before)	p-value
1	3.93	3.11	-0.82	0.06
2	4.64	4.33	-0.31	0.53
3	4.21	3.56	-0.66	0.07
4	3	3.44	0.44	0.37
5	3.43	3.44	0.02	0.98
6	3	2.11	-0.89	0.07
7	3.64	3	-0.64	0.23
8	3.57	3.22	-0.35	0.41
9	3.14	3.44	0.3	0.57
10	3.21	3.22	0.01	0.99
11	2.43	2.75	0.32	0.39
12	4.43	4.56	0.13	0.83
13	2.71	2.89	0.17	0.7
14	3.79	3.56	-0.23	0.63
15	4.29	3.67	-0.62	0.3
16	1.93	1.89	-0.04	0.91
17	2	2.22	0.22	0.5
18	2.36	2.56	0.2	0.64
19	2.79	2.78	-0.01	0.98
20	2.86	2.89	0.03	0.94
21	1.57	1.38	-0.2	0.61
22	2.64	2.44	-0.2	0.65
23	2.57	2.56	-0.02	0.97
24	1.71	1.67	-0.05	0.87
25	1.31	1.33	0.03	0.93

Hand written qualitative responses were also collected from the participants' post-intervention. Responses from the participants favored the intervention in regards to stress reduction and self-care. Participant responses are shown in Table 2. The question's number refers to the first survey question of the Perceived Stress Scale and ends with question 10 being the final question of the Perceived Stress Scale. Question number 11 corresponds to the first question of the MAAS and question 25 the final question of the MAAS (see Appendices A and B for complete surveys). The findings did not validate the hypothesis.

Qualitative responses obtained from participants differed greatly from the survey results. Sixteen of the twenty participants generated comments regarding the intervention. Several themes emerged from analysis of the data. The primary theme that emerged was that participants were able to appreciate mindfulness techniques as a tool for stress reduction. One participant commented "Learning mindfulness techniques have helped me become more centered and be able to relax during stressful times." Another student experienced an understanding of the way to use mindfulness techniques to reduce stress during nursing school, "Nursing school and nursing in general can be very challenging and stressful and the techniques you have provided us will be very useful, and I really like focusing on my breathing with my eyes closed."

The benefit of breath work was another theme that emerged from the data analysis. Participants commented "I am more aware of my breathing," and "I really liked focusing on my breathing with my eyes closed."

A final theme that emerged from the data analysis is the participants found value in the use of mindfulness techniques in conjunction with the nursing program. One participant

commented that the mindfulness techniques were helpful and “you need to introduce this mindfulness class at the beginning of our nursing course” and another participant commented that mindfulness techniques should be “more structured into the curriculum.” The value of mindfulness techniques in the nursing program was further demonstrated by another participant who stated “I found mindfulness techniques to be particularly useful in the last course of my nursing program at SCU. I found these techniques to be useful prior to starting a clinical shift.”

Based on the qualitative data, participants supported the use of mindfulness for stress reduction and found value in learning a technique for stress reduction.

## Chapter 5

### Discussion

This SCP was performed to determine the effectiveness of a brief intervention using mindfulness techniques with nursing students to reduce stress and promote self-care using descriptive statistics. This project consisted for two 1-hour interventions utilizing mindfulness techniques. Since the sample sizes for the project were small, statistical significance is difficult to attain. The sole use of qualitative data may have been more appropriate for this SCP based the small sample size and possibility of type II error due to the small sample size. The qualitative data collected is consistent with previous studies that showed a reduction in stress in nursing students with the use of mindfulness techniques.

Although no statistical significance was found, of interest are questions 1 (“I could be experiencing some emotion and not be conscious of it until sometime later.”), 3 (“I find it difficult to stay focused on what’s happening in the present.”), and 6 (“I forget a person’s name almost as soon as I’ve been told it for the first time.”) of the MAAS where p-values were 0.06, 0.07, and 0.06 respectively. The responses to these statements tended toward more frequently post-intervention versus less frequently pre-intervention. While this was not the expected outcome, it could be suggested that the intervention made the participants more aware of their experiences and thus led to an increase in the values.

### Conclusion

No statistical significance was found during the data analysis for this SCP. The lack of statistical significance may be due to several factors including low number of participants, the homogeneity of the group, and time of the year. The participants were completing their

studies and focusing on the nursing board exam, so this may have caused an increase in normal stress levels. Although no conclusions can be drawn from this SCP based on the data and small number of participants, valuable insights were gained. Based on the qualitative data, participants supported the use of mindfulness for stress reduction and found value in learning a technique for stress reduction.

### **Recommendations**

A more lengthy study with a longer mindfulness intervention, more participants, and a longer follow up period is needed to more fully examine the benefit of mindfulness techniques for stress reduction and self-care in nursing students. Enough evidence already exists in regards to the fact that increased stress is experienced by nursing students, but there is little evidence of what strategies work to reduce this stress. It is the duty of doctorally-prepared nurses engaged in nursing education to incorporate strategies for stress reduction in the classroom so a foundation can be laid for health promoting behaviors for students now and into the future.

Based on what has been learned from this SCP, in the expansion or replication of this SCP, the writer would begin the project with a discussion with the nursing faculty. A discussion amongst nursing faculty in regards to what is already being done in the classroom for stress reduction in students is a starting point. This discussion may bring awareness to nursing faculty that they may already be practicing mindfulness techniques in the classroom. This discussion could aid faculty in expanding their use of mindfulness techniques with the students in a manner that works best for them and gives students yet another option for stress



reduction. This SCP serves as a call to doctorally-prepared nurses to take a leadership role in the exploration of interventions through research for stress reduction in nursing students.

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*Appendix A*

Perceived Stress Scale by Cohen, Kamarck, & Mermelstein (1983)

0 = Never    1 = Almost Never    2 = Sometimes    3 = Fairly Often    4 = Very Often

1. In the last month, how often have you felt upset because of something that happened unexpectedly?

0                    1                    2                    3                    4

2. In the last month, how often have you felt that you were unable to control the important things in your life?

0                    1                    2                    3                    4

3. In the last month, how often have you felt nervous and “stressed?”

0                    1                    2                    3                    4

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

0                    1                    2                    3                    4

5. In the last month, how often have you felt that things were going your way?

0                    1                    2                    3                    4

6. In the last month, how often have you found that you could not cope with all the things you had to do?

0            1            2            3            4

7. In the last month, how often have you been able to control irritations in your life?

0            1            2            3            4

8. In the last month, how often have you felt you were on top of things?

0            1            2            3            4

9. In the last month, how often have you been angered because of things that were out of your control?

0            1            2            3            4

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

0            1            2            3            4

*Appendix B*

Mindfulness Attention Awareness Scale (MAAS) by K.W. Brown & R.M. Ryan (2003)

0 = Almost Always    1 = Very Frequently    2 = Somewhat Frequently    3 = Somewhat Infrequently  
4 = Very Frequently    5 = Almost Never

1. I could be experiencing some emotion and not be conscious of it until sometime later.

0    1    2    3    4    5

2. I break or spill things because of carelessness, not paying attention, or thinking of something else.

0    1    2    3    4    5

3. I find it difficult to stay focused on what's happening in the present.

0    1    2    3    4    5

4. I tend to walk quickly to get where I am going without paying attention to what I experience along the way.

0    1    2    3    4    5

5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.

0    1    2    3    4    5

6. I forget a person's name almost as soon as I've been told it for the first time.

0    1    2    3    4    5

7. It seems I am "running on automatic," without much awareness of what I'm doing.

0    1    2    3    4    5

8. I rush through activities without being really attentive to them.

0    1    2    3    4    5

9. I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.

0    1    2    3    4    5

10. I do jobs or tasks automatically, without being aware of what I'm doing.

0    1    2    3    4    5

11. I find myself listening to someone with one ear, doing something else at the same time.

0    1    2    3    4    5

12. I drive places on "automatic pilot" and then wonder why I went there.

0    1    2    3    4    5

13. I find myself preoccupied with the future or past.

0    1    2    3    4    5



14. I find myself doing things without paying attention.

0      1      2      3      4      5

15. I snack without being aware that I'm eating.

0      1      2      3      4      5