The Implementation of Mindfulness Training with Nursing Students to Decrease Stress and Improve Attentiveness and Awareness

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The Implementation of Mindfulness Training with Nursing Students to Decrease Stress and Improve Attentiveness and Awareness

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Abstract

This project was the implementation of mindfulness training for undergraduate baccalaureate nursing students to decrease perceived stress and increase their awareness and attention through mindfulness. The literature supports the importance of stress reduction in regard to improving perceived well-being and consequently improving ability to learn. Mindfulness is identified as an important aspect of self-care that increases awareness and attention, while ultimately improving well-being, all of which leads to better knowledge acquisition and the ability to be empathetic. For nursing students this includes improved knowledge acquisition, technical skills, clinical knowledge and critical decision making. The literature clearly supports the tenet that improved learning leads to more resilient and empathetic nurses. This project selected a convenience sample of second year baccalaureate nursing students and assessed their perceived stress levels as well as attentiveness and awareness through mindfulness at the beginning of their spring semester. They were trained in a modified Mindfulness Based Stress Reduction (mMSRB) program, which they then implemented in their lives. Their perceived stress levels and mindfulness were reassessed after the implementation of the MBSR program at the end of the spring semester. The results showed that the effect of a mMBSR program is significantly related to reduced perceive stress levels and increase attentiveness and awareness of nursing students.

Keywords: mindfulness, cognitive behavioral training, stress, anxiety, empathy, well being, nursing, and students
The Implementation of Mindfulness Training with Nursing Students to Decrease Stress and Improve Attentiveness and Awareness

Introduction

Nursing, as a profession, is based not only on technical skills, clinical knowledge and critical decision making but also on caring and empathy. Caring and empathy are central to nursing, one could argue that caring and empathy uniquely define nurses within the health profession world. Yet, within this world of caring and empathy it is well accepted that nursing education is a high stress, high stakes endeavor neither of which support the development of caring and empathy. Many educational programs for the health professions also have demanding programs, but nursing students continue to identify higher levels of stress than other students, not in nursing, at the same institutions (Beddoe & Murphy, 2004). If this stress were simply endured, with no long term consequences, there would be no issue other than momentary psychological discomfort for the involved nursing students. But, this is not the case. Research demonstrates that academic performance is adversely affected by stress (Beddoe & Murphy, 2004). Stress also negatively affects the development of empathy and interpersonal relationships, both central to the role of the nurse (Beddoe & Murphy, 2004). Without the ability to understand and share another human’s feelings, or in nursing, our patients’ feelings, we are severely diminished as healers.

Background

The ultimate concern is ensuring the development of both competency and empathy in nursing students. The intermediate concern, the one addressed in this project, is how to best decrease stress for nursing students with the goal to increase knowledge acquisition and
increased mindfulness and empathy. A nurse’s education is the foundation from which competence and empathy can be developed. As a result of the high stress levels that nursing students’ experience, the opportunity for developing competency and empathy is diminished (Beddoe & Murphy, 2004). One solution for decreasing the level of stress of nursing student is to implement mindfulness training during the early years of their education. An intervention early in the student’s educational journey would improve the ability to cope with stress, improve the ability to learn new skills and concepts through increased mindfulness, improve critical thinking, and consequently aid in the development of competent, capable, resilient, empathetic nurses.

**Problem Statement/Purpose of Project**

Nursing students experience a high level of stress in their high stakes educational environment and this experience diminishes their ability to lay down knowledge and skills and ultimately diminishes their ability to be capable, skilled empathetic nurses. The purpose of this project was to implement a mindfulness program for baccalaureate nursing students to improve their sense of well-being and mindfulness as evidenced by decrease levels of anxiety, improved perceived sense of well-being, attentiveness, awareness and subsequent ability to learn and be empathetic. This project “The Implementation of Mindfulness Training with Nursing Students to Decrease Stress and Improve Attentiveness and Awareness” addresses this identified problem.

**Review of the Literature**

As a foundation for the project a review of the literature was conducted using the search terms: mindfulness, cognitive behavioral training, stress, anxiety, empathy, well-being, nursing, and students. EBSCO, Cochrane, CINHAL, PubMed and OVID were utilized as databases. When mindfulness was utilized as a search term the scope of articles was severely limited. When
cognitive behavioral therapy was used as a search term in addition to mindfulness the number of articles was greatly increased and thus broadened the scope of the literature available for review.

A total of 48 articles were initially reviewed with 15 being selected for use in this project. The articles included were, in general, from peer reviewed journals from multiple disciplines within the health sciences field. An effort was made to utilize current research but some of the articles included are seminal works. One exemplar of this is Kabat-Zinn’s (2003) discussion of mindfulness in *Clinical Psychology: Science and Practice*.

Mindfulness is defined as “paying attention in a particular way: on purpose, in the present moment and nonjudgmentally” (Bodenlos, Wells, Noonan and Maursohn, 2015). Well-being was utilized as a search term in place of wellness as wellness was not found to be an effective descriptor. The articles reviewed were from peer reviewed journals from multiple disciplines and focused on different aspects of mindfulness. The research that will be reviewed will be divided into three categories. First, is mindfulness the specific characteristic that affects stress levels? Secondly, does mindfulness affect health/well-being and stress in different populations? Thirdly, how does mindfulness specifically affect nursing students’ level of stress and what is its relationship to empathy.

Ratanasiripong, Park, Ratanasiripong and Kathalae (2015) in “Stress and Anxiety Management in Nursing Students: Biofeedback and Mindfulness Meditation” found that biofeedback significantly reduced anxiety but did not decrease stress levels. Mindfulness, though, did significantly reduce anxiety and stress. Ratanasiripong et al. (2015) randomly assigned their sample of 89 nursing students in Thailand to one of three groups. The first group had the intervention of biofeedback, another with the intervention of mindfulness and the third a control group. Their conclusion was that both interventions were effective, although mindfulness
was effective in different domains and biofeedback in only one. A weakness of this study is the focus on the immediate effect of mindfulness but not the long term effect of mindfulness. The sample was from one nursing school and would need to include a more diverse population to improve reliability. This study is extremely important in identifying mindfulness as being a higher order intervention than biofeedback. This study enables future research to be focused on mindfulness as being an efficacious intervention for reducing stress.

The main body of the retrieved research focused on mindfulness and its effect on stress, anxiety and multiple health outcomes. Foureur, Besley, Burton, Yu and Crisp (2013) in their research focused on improving resilience in nurses and midwives thorough increasing health and decreasing stress addressed multiple effects of stress. It is a pilot study with a convenience study of 20 midwives and 20 nursing students from 2 urban hospitals. The design of the study was a pre/post-test in respect to the intervention. This study utilized the Kabat-Zinn’s mindfulness-based stress reduction (MBSR) intervention in a modified form (Kabat-Zinn, 2003). This is the mindfulness intervention that is most commonly found in the research. Fourier et al. (2013) argue that midwives and nursing students are “socialized in a way the decreases the possibility of self-care”. The goal of the study, that it clearly met, was to ascertain whether the modified MBSR implementation is acceptable and feasible. This was accomplished and not only was the modified MBSR found to be acceptable and feasible it also demonstrated that mindfulness is in fact effective. In addition, the authors present a valuable history of resilience. They tie the third phase of resilience to self-care and mindfulness.

Bodenlos, Noonan and Wells (2014) in their research on mindfulness and alcohol use and their effects on mediating stress for college students identified the endpoint as alcohol problems but found that stress is the mediating factor between mindfulness and alcohol issues. The sample
was 310 undergraduate students from the Northeast. The students were recruited from different academic departments and administered questionnaires regarding mindfulness, stress and alcohol use. The findings were that the relationship between mindfulness and problems with alcohol use was mediated by stress (Bodenlos et al., 2013). This strengthens the support for mindfulness as the appropriate intervention in reducing stress. A weakness for this study was not assessing other emotional/behavioral health issues that might affect alcohol use; a large sample and controlling for these variables would address this issue. A very important discussion point in this research is that of stress. The authors argue that stress for college students is unlikely to decease, the more effective way to intervene is to increase students’ ability to adapt/cope with stress. This assertion gives additional support to this project.

In their study, Bodenlos, Wells, Noonan and Maursohn (2015) investigated what dispositional mindfulness was and what characteristics made up its composition. The authors then evaluated the relationship of each of the different facets of dispositional mindfulness to physical health. In a sense, they “unpack” mindfulness. This study used a convenience sample of 310 students from a Northeast college. Bendenlos et al. (2015) identified five facets of mindfulness: observing, describing, acting with awareness, and non-reactivity to inner experience. The authors identified instruments to measure each of these facets. They then performed multiple regression analysis to assess the relative relationships of the variables. Acting with awareness and non-reactivity were found to be most significantly related to wellness. They identify a few weaknesses in their study, first the homogeneity of the sample and secondly that two of the instruments utilized (for diet and exercise) were not validated.

Kemper, Mo and Khayat (2015) developed a cross-sectional study with 213 clinicians and students. It demonstrated that there is a strong correlation between sleep and resilience and
mindfulness. The question that needs to be answered is: does improving mindfulness also improve sleep and resilience? The weakness of this study was that all the participants came from one health center and the majority did not have severe sleep disturbances.

Murphy, Mermelstein, Edwards and Gidycz (2012) followed 441 college students for over two years. They found that dispositional mindfulness is related to healthy eating, good sleep and optimal health. They also found that these relationships are bidirectional. The population, once again, was homogeneous. The sleep instrument was also not validated and the time period was also not extended. The study, in spite of these weaknesses, still lends support to the value of mindfulness in wellness.

The final article to be discussed brings all the aspects of mindfulness, wellness, stress and empathy together. It is also a pilot study of nursing students at the baccalaureate level (Beddoe and Murphy, 2004). A convenience sample of 16 nursing students was identified. The goals were to institute the MBSR and evaluate whether it decreased stress and improved empathy. The authors found that there was a significant decrease in anxiety assessed through pre/post-test assessments. The authors discussed the difference between emotional contagion and empathetic concern. Emotional contagion is a maladaptive process that occurs with nurses and leads to emotional exhaustion; empathetic concern is an adaptive process that improves the nurses’ ability to care and ultimately benefits patients. Mindfulness appears to shift nurses from the process of emotional contagion to empathetic concern. This pilot study is central to the development of capable, empathetic nurses and naturally leads to the development of a large scale RCT study.

The discussion of the facets of mindfulness and its relationship to wellness as well as stress levels have been well supported by most of the reviewed research (Beddoe & Murphy,
The research has been in the form of pilot and cross-sectional studies, with both small and large samples, but all which have been convenience samples. Many have focused on nursing students, some on clinicians and some on liberal arts undergraduate students. A strong case has been made for the ongoing high stress, high stakes environment in which that students “live”. The need for nurses to take part in self-care, with mindfulness being central to their well-being has been made. The relationship between mindfulness, decreased stress, physical well-being and their effect on empathy has been put forth. The literature appears to support implementing mindfulness programs for nursing students to decrease stress, improve physical well-being and improve future patient care through empathy. More investigation is needed to identify larger, heterogeneous RCT studies regarding the identified issues through the use of MBSR programs.

**Theoretical Framework**

The grand theory that supports the basis of this public health nursing project is Parse’s Theory of the Human Becoming (Parse, 2007). This theory focuses on patients making healthy choices with the nurse’s guidance and that these healthy choices, ultimately, improve their quality of life. This paradigm can be transferred to the educational system with the nursing student as the focal point and their resultant well-being and how it, their well-being, affects the quality of their ability to become a nurse. Utilizing the Human Becoming Model, the nursing student, through the practice of mindfulness, will increase the possibility of decreased stress and increased awareness and attention leading to increased “presence” during their nursing education.
Methods

The student participants were recruited on campus during the first week of the spring semester. Flyers were posted in the Nursing department, the Wellness Center and the Student Center on campus. If the potential participants met the inclusion requirements, they were identified as potential participants and then met with the administrative assistant who discussed the time commitment and the process in general. Those students who were interested were then enrolled in the project. The administrative assistant obtained consent then administered the Cohen Perceived Stress Scale (PSS) and the Mindfulness, Attention and Awareness Scale (MAAS) assessments to all the participants at one of two prescheduled times (Cohen & Janicki-Deverts, 2012) (Newsome, Waldo & Gruszka, 2012).

The student participants were then provided 4 hours of instruction by a qualified instructor in mindfulness and practiced this skill for 12 weeks. They were asked to commit 30 minutes a day to this activity but ultimately it was their decision as to how much time they committed to the practice of mindfulness. The administrative assistant re-administered the PSS and MASS to the student participants at one of two prescheduled times at the end of the semester.

Goals/Objectives/Outcomes

The goal of this project was to teach nursing students to utilize the modified Mindfulness Based Stress Reduction (mMBSR) program to reduce their perceived stress level and improve their attention and awareness through mindfulness. Ultimately this reduced level of stress and improved mindfulness increases their ability to learn, improves resiliency and be more
empathetic. This practice intervention project measured the outcome of perceived stress level and mindfulness.

The outcome measures are the Perceived Stress Scale (PSS) (Cohen & Janicki-Deverts, 2012) and the Mindful Attention and Awareness Scale (MAAS) (Newsome, Waldo & Gruszka, 2012). The outcomes in this test/retest designed study are that the aggregate scores of the PSS and MAAS after the modified MBSR intervention was implemented have demonstrated decreased perceived stress and increased mindfulness.

**Data Analysis**

The Perceived Stress Scale (PSS) was utilized to measure level of perceived stress of the participants of the project (Cohen & Janicki-Deverts, 2012). This is a 10-item scale that measured perceived stress level using a Likert Scale (Appendix A). This scale is in the public domain. The Mindfulness Attention Awareness Scale was utilized to measure awareness and attention through mindfulness, it is a 15 item self-reported assessment and is also in the public domain. This data was collected by the administrative assistant before the implementation of the intervention and after 12 weeks of implementation of mindfulness training. This data was collected from the students over a one-half hour period pre and post intervention. The data was analyzed with IBM SPSS Statistics (Version 24.0). The distribution of the scores for each test was determined and the distribution of the scores was found to be normal. A paired t-test was used for analysis. The significance level was \( p < .05 \).

**Project Site and Population**

The project took place in New England at a university with an on campus population of approximately 2000 students. The University takes pride in being a “First Gen” school where
this is often the first post-secondary level of academic education that a family has participated in. It is part of the State school system. The Wellness Center on campus was pleased to host this project as the staff identified stress as an issue with all students, and in particular, the nursing students.

The focus population was students who were actively enrolled in the University’s Nursing program. The Nursing program has approximately 160 students with 65 currently being enrolled in the second year of study. The second year was chosen to be the focus of this project. The first year students were meeting their general education requirements and have not truly started their nursing curriculum and, therefore, were not appropriate for this project. The second year students were taking two nursing courses as well as a science as this is the year that the nursing curriculum begins. The student participants were recruited as a convenience sample. They were second year students and were not students who were repeating courses because of academic failures. They were working no more than 16 hours per week outside of the college. The higher the number of hours worked per week the higher the level of stress the students experience; therefore, the students who work more than 16 hours of work a week experience more stress than their classmates. If students are experiencing severe levels of stress from social, economic, physical issues, they are usually placed on leave from the University and thus were not included in the project. There were no gender restrictions. The inclusive age range was 18 years of age to 49 years of age.

**Ethical Considerations/Protection of Human Subjects**

The practice intervention project received IRB approval from UMASS Amherst. The subjects identified to take part in the project were protected by the Health Insurance Portability and Accountability Act (HIPAA). The subjects have had all Personally Identified Information
(PII) protected and the subjects were identified by assigned numbers. All data has been password protected and hard copies have been kept behind two locked doors. The data has been presented in the aggregate form. The self-selected subjects were not considered a vulnerable population because none of their faculty were involved with the project. In fact, no faculty in the Nursing department were aware of which students were the identified participants. The practice intervention project has been conducted following the Joint Commissions Standards of Care for Primary Care and this has ensured protection of the subjects and project staff (JCAH, 2008).

The major ethical issue related to this DNP Project was related to those who have access to the intervention versus those who would not have access to the intervention. As a result of using a pre/post-test design, there was no control group who would have necessarily been denied access to the intervention. The literature supports this intervention and has found it to be effective. Those who would not have had access to the intervention would be in a more vulnerable position in terms of success in the Nursing program. If the intervention was not well supported, the mere participation would have been harmful, in that it would take some student time away from their studying. This could have been an ethical consideration, but because the intervention is well supported it was unlikely to be an issue.

**Results**

The project “The Implementation of Mindfulness Training with Nursing Students to Decrease Stress and Improve Attentiveness and Awareness” was implemented in a small liberal arts State university in New England during the spring semester of the sophomore year for nursing students in a baccalaureate program. The students were of both genders, although predominantly female. They ranged in age from 19 years to 45 years. Thirteen participants were
initially recruited and completed the first set of questionnaires and, ultimately, 10 students, 8 females and 2 male, completed both the intervention and the final questionnaires.

The results for this project were twofold. The first data that was analyzed was the participant’s perceived stress level, this was evaluated by the Cohen’s Perceived Stress Scale. A paired t-test was utilized with the pre-intervention assessment and a post intervention assessment. The pre-test (M = 22.3, SD = 3.95) reported significantly higher levels of perceived stress than the post-test (M = 15.5, SD = 5.46), t(1) = 4.15, p > .05.

The second set of data analyzed was that of attentiveness and awareness and was evaluated by the Mindful Attention Awareness Scale. A paired t-test was utilized with the pre-intervention assessment and a post-intervention assessment. The pre-test (M = 2.86, SD = .57) reported significantly lower levels of attentiveness and awareness that the post-test (M = 3.78, SD = .65), t(1) = 3.26, p > .05.

The following table shows the percent change from the pretest assessment to the post test assessment for both the Cohen Perceived Stress Scale (PSS) and the Mindful Attention Awareness Scale (MAAS) for each individual participant. The desired effect of the PSS is a negative percent change which would indicate decreased perceived stress and the desired effect for the MAAS is a positive percent change, indicating increased mindfulness, attention and awareness.
Table 1

Percent changes of the PSS and MAAS pre/post test scores

<table>
<thead>
<tr>
<th>Participant ID#</th>
<th>PSS % change</th>
<th>MAAS % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-4</td>
<td>-45</td>
</tr>
<tr>
<td>2</td>
<td>-46</td>
<td>+24</td>
</tr>
<tr>
<td>3</td>
<td>+5</td>
<td>+31</td>
</tr>
<tr>
<td>4</td>
<td>-79</td>
<td>+27</td>
</tr>
<tr>
<td>5</td>
<td>-29</td>
<td>+37</td>
</tr>
<tr>
<td>6</td>
<td>-24</td>
<td>+30</td>
</tr>
<tr>
<td>7</td>
<td>-22</td>
<td>+14</td>
</tr>
<tr>
<td>8</td>
<td>52</td>
<td>+52</td>
</tr>
<tr>
<td>9</td>
<td>-40</td>
<td>+36</td>
</tr>
<tr>
<td>10</td>
<td>-11</td>
<td>+25</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>-30.2</strong></td>
<td><strong>+23.1</strong></td>
</tr>
</tbody>
</table>

**Discussion**

This project demonstrated that a mMBSR program, when implemented in a high stress nursing program, significantly decreased perceived stress and increase attentiveness and awareness. The literature demonstrates that other methods to decrease anxiety, for example biofeedback alone, decreased anxiety but not stress levels. Increased mindfulness decreased both (Ratanasiripong et al., 2015). The majority of MBSR programs have a lengthy training time commitment. This barrier was also one of the identified problems. Students are exceptionally
busy thus leading to high levels of stress in nursing programs. Students need to see the relevance of this intervention and be able to implement the skills they learn. This barrier, identified early in the process, has been further substantiated by Penprase (2015) who found that her research had such high levels of attrition that only 4 of 14 nurses completing the MBSR program. Their research was greatly impacted by attrition but she still presented strong support for MBSR programs. This project had a lower attrition rate most likely because of the attention to the required time commitment.

Fourer, Besley, Burton, Yu and Crisp (2013) supported the use of a modified MSBR program. This has been found to be central to implementing these programs for nurses. Lack of time available to address the identified issues is a clear barrier. Beddoe and Murphy (2004) also support the use of instituting a MBSR program for nursing students and had similar result to this project. They found that MBSR programs decreased stress and increased empathy. This project demonstrated a significant relationship between decreased perceived stress and improved attentiveness and awareness, the essential components of mindfulness (Bodenlos, Wells, Noonan and Maursohn, 2015).

Parse’s Theory of the Human Becoming focuses on individuals making healthy choices with nurse’s guidance and these changes improve their quality of life. In this project, the individual is the nursing student and the improvement in their life is decreased perceived stress and improved mindfulness leading to improved personal and professional well-being. Thus nursing education can develop competent, capable, empathetic, resilient nurses.
Conclusion

Nursing students, at the baccalaureate level, are confronted with a demanding and stressful educational environment that reflects our current healthcare environment. Nursing education is both high stakes and overwhelming in term of knowledge acquisition and development of skills and clinical decision making. To develop effective, resilient nurses to serve our patient population successfully over time is the challenge.

The intervention that we implemented was a modified Mindfulness Based Stress Reduction program and was presented to a sample of sophomore level baccalaureate nursing students. It was implemented through the Wellness Center on the University campus and was composed of a 4 hour session in which mindfulness was taught in a sequential manner. The techniques that were focused on were progressive relaxation, sitting meditation, Hatha yoga and walking meditation. The participants then implemented the skills and techniques that they had learned. Their level of perceived stress was assessed pre- and post- intervention. The relationship between the intervention and decreased perceived stress and increased mindfulness was significant. It is clear that exposure and use of the mindfulness training affected the students’ perceived stress levels and attention and awareness. It would be helpful to know if the effect was “dose related”. In other words did those who were more consistent in their practice of the mindfulness have a better or greater affect. This would be a suggestion for further research. The translational research of this project will give further support to implementing modified MBSR programs in baccalaureate programs in general. A program to continue this initiative for the nursing students is planned to be included in the Wellness Centers offerings at the university were the project was implemented. The mindfulness instructor is already an employee of the Wellness Center and has agreed to add this to her curriculum. It will be discussed and presented
to the students during their first course in the nursing curriculum as well as be reintroduced in the Health Promotion curriculum of the Nursing program. This project has been presented at the State University level and will be presented to the Wellness Community at the identified University in August 2018.

It is clear that the high stress and the competitive environment that nursing students are being educated in, and the professional environment that our students will be working in is not conducive to knowledge acquisition or the development of caring and empathy. The implementation of mMBSR program is necessary to promote what may be the very essence of nursing - knowledge, compassion and empathy.
References


Appendix A
COHEN PERCEIVED STRESS

The following questions ask about your feelings and thoughts during THE PAST MONTH. In each question, you will be asked HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are small differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the exact number of times you felt a particular way, but tell me the answer that in general seems the best.

For each statement, please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time)

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Fairly Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past month, how often have you been upset because of something that happened unexpectedly?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. In the past month, how often have you felt unable to control the important things in your life?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. In the past month, how often have you felt nervous or stressed?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. In the past month, how often have you felt confident about your ability to handle personal problems?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. In the past month, how often have you felt that things were going your way?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. In the past month, how often have you found that you could not cope with all the things you had to do?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. In the past month, how often have you been able to control irritations in your life?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. In the past month, how often have you felt that you were on top of things?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>Never</td>
<td>Almost Never</td>
<td>Sometimes</td>
<td>Fairly Often</td>
<td>Very Often</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------------</td>
<td>-----------</td>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>9. In the past month, how often have you been angry because of things that happened that were outside of your control?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. In the past month, how often have you felt that difficulties were piling up so high that you could not overcome them?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix B

Mindful Attention Awareness Scale

Day-to-day experiences

Instructions: Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost</td>
<td>Very</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Very</td>
<td>Almost</td>
</tr>
<tr>
<td>Always</td>
<td>Frequently</td>
<td>Frequently</td>
<td>Infrequently</td>
<td>Infrequently</td>
<td>Never</td>
</tr>
</tbody>
</table>

- I could be experiencing some emotion and not be conscious of it until some time later
- I break or spill things because of carelessness, not paying attention, or thinking of something else.
- I find it difficult to stay focused on what’s happening in the present.
- I tend to walk quickly to get where I’m going without paying attention to what I experience along the way.
- I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
- I forgot a person’s name almost as soon as I’ve been told it for the first time.
- It seems I am “running on automatic”, without much awareness of what I’m doing.
- I rush through activities without being really attentive to them.
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<tbody>
<tr>
<td>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.</td>
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<td>I do jobs or tasks automatically, without being aware of what I’m doing.</td>
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<td>I find myself listening to someone with one ear, doing something else at the same time</td>
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<td>I drive places on “automatic pilot” and then wonder why I went there.</td>
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<td>I find myself preoccupied with the future or the past</td>
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<td>I find myself doing things without paying attention</td>
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<td>I snack without being aware that I’m eating.</td>
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