



Centering: An Antidote for Stress and Catalyst for Learning



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Abstract

Background: Prelicensure nursing students may experience stress during in-class instruction and clinical rotations that impede their ability to acquire critical skills and knowledge. Meditation and mindfulness are effective strategies to reduce stress and anxiety, but little is known about their use with prelicensure nursing students.

Methods: During an academic year, the instructor began each session of six prelicensure nursing courses with a centering activity. Centering activities included music only, guided imagery, positive self-talk, body scanning, mindfulness, or simply sitting in silence. Students submitted confidential feedback by completing a 10-item survey or writing a brief descriptive essay about the impact of centering activities on their learning experiences.

Results: Students reported benefits from participating in centering activities that included reduced anxiety and stress, improved mental clearing and transitioning into learning mode, enhanced engagement in learning activities, and enhanced teamwork experiences.

Conclusion: Centering activities before class provide multiple benefits for nursing students and their use should be expanded.

Introduction

Nursing students experience high demands during in-class instruction and clinical rotations that may lead to hormonal stress responses affecting memory and learning [1,2]. In addition to the physical and psychological effects of stress, barriers to learning may also arise. The ability to concentrate, problem solve, and make decisions can be significantly decreased under stress [3,4]. These barriers can impact the acquisition of critical skills needed by nursing students to learn to provide high quality and safe care.

Review of the Literature

Impact of meditation and mindfulness on learning

In this paper, the authors use the term “centering” to represent both meditation and mindfulness activities. There is a lack of consensus regarding the definition of meditation [5]. The authors used the following definition of meditation: “Meditation includes techniques such as listening to the breath, repeating a mantra, or detaching from the thought process, to focus the attention and bring about a state of self-awareness and inner calm” [6]. It has roots that span history, primarily appearing in religious practices. However, in recent times, meditation has become a phenomenon practiced by many for its substantial benefits regardless of their religious affiliation. Meditation has been shown to reduce stress and anxiety

and promote relaxation in various populations, including new graduates and experienced nurses transitioning to new roles [7,8], health care employees and professionals [9,10] and primary care clinicians [11]. It has also been effective in enhancing academic learning and achievement among nursing, midwifery, premedical, medical, and baccalaureate students [12].

Mindfulness is described as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmental to the unfolding of experience moment by moment”. Its roots reach back to the teachings of Buddha. Dr. Kabat-Zinn [13] developed the Mindfulness-Based Stress Reduction (MBSR) program in 1979 at the University of Massachusetts to treat the chronically ill. Since then, many others have recreated his work with the hopes of unveiling more benefits in other populations. To date, numerous reports reflect that mindful meditation offers a variety of benefits, including decreased stress and anxiety, enhanced compassion and empathy [14-16] and decreased depression [17,18]. Most significant to nursing students is evidence that mindfulness enhances compassion and empathy among medical and premedical students [19]. The goal of the current project was to assess impact on attitudes about and experiences of learning when classes were begun with centering activities among prelicensure nursing students in an urban university setting.

Methods

Participants and intervention

Centering activities were conducted with nursing students enrolled in Bachelor of Science in Nursing programs in the traditional two-year (BSN) track or the accelerated 12-month (ABSBN) track during the 2014-2015 academic year. The project was conducted in six courses representing didactic and clinical course types across all levels of the program and at the start of class sessions, presentations, and exams. After welcoming students to the class session, the instructor guided them to prepare for meditation or mindfulness activities. They were asked to silence mobile devices, close computer screens, and reposition into a comfortable position in their seats or on the floor. The option of lying on the floor was also available. The classroom lights were turned off and room shades drawn.

Centering activities lasted 3-5 minutes and consisted of multiple strategies such as music, guided imagery, video/audio media, positive self-talk, body scanning, reading of poetry or short essays, or simply sitting in silence. These activities were accompanied by guided focus on breathing and incorporated accessories that included chimes, singing bowls, Asian cymbals, and an African rain stick. Students who arrived after the start of centering activities were greeted in the hallway and guided through focused breathing exercises by a teaching assistant.

Measured outcomes

At the end of each course, students were offered the opportunity to use the school's online learning management system to confidentially complete either a survey or a brief descriptive essay to evaluate how beginning each class session with centering activities impacted their learning experiences. A 10-item survey was constructed by the first author and included the following items: previous experience with self-care or stress reduction activities, favorite centering activities, the impact of centering activities on their learning, whether or not they had used guided imagery more often as a self-care or stress management activity, whether or not they consciously listened to music more often as a self-care or stress management activity, why they didn't practice self-care or stress management activities (if applicable), additional ideas about centering activities, valuable takeaways they experienced from participating in the centering activities, and any additional thoughts that they believed would be helpful for the instructor about centering activities within the class structure.

Analysis

Interview data, field notes, and analytical notes were coded and collaboratively analyzed by the authors. Construction and confirmation of the categories and related themes derived from the data was a collaborative process. Verbatim quotes were selected to illustrate the themes that emerged and participants' perspectives.

Results

A total of 154 students participated in the centering activities and were offered the opportunity to complete the survey or

descriptive essay. Of these, 112 responded, yielding a response rate of 72.7%. However, data were unavailable for 12 students who participated in the survey because of technical difficulties. Thus, data were available for 100 BSN and ABSBN students, yielding an effective response rate of 64.9%. Students reported myriad benefits from participating in centering exercises at the beginning of each class period. These activities helped them to focus and to be present, reduce stress, and to relax and not be jittery during presentations and exams. They also reported experiencing three unique benefits that have not been reported in the nursing literature: enhanced transitioning into learning mode, engagement during class activities, and an improved sense of team cohesion during group activities. These themes, which emerged from the data, are discussed in detail with illustrative quotes.

Transitioning to learning mode

Students described transitioning as a cognitive process during which they experienced a movement or readiness to learn. Although a handful of students were initially skeptical regarding the benefits of centering on learning, their perspectives shifted after feeling the benefits of relaxation in the learning environment. As one student said, "I feel that the centering activities are a great way to make the transition from the half-awake state (especially because I am not a morning person) into a more focused state of mind." This theme was described by other students as follows:

- A. The centering activities had an enormous impact on more than just my learning! It really did allow me to leave "my junk" at the door. It left me feeling calm, focused, and ready to learn because I wasn't distracted with other thoughts.
- B. I really felt the valuable take away from the [centering] exercises was their ability to help separate "the rest of my life" from the "lecture" that I was about to begin. Taking that pause each morning helped clear my mind, brought down my heart rate, and put me in a more peaceful state of mind to learn.
- C. At first I was highly skeptical of the exercises, but as time went on I truly felt that the centering exercises helped shape my learning for the day by setting me into a calm mood first. It allowed me to become more receptive to what I was learning that day.
- D. I suffer from anxiety. Our use of centering activities has been helpful as it helps me get centered and ready for lecture. I can let go of worries and other thoughts during our meditation and come out the other side with a clearer focus. This enables me to concentrate on the information that is coming my way. It also reminds me to not be judgmental of the information, but to listen with an open attitude.

Engagement in class activities

Students described engagement as cognitive and behavioral perceptions experienced during their learning activities. Overall, students reported embracing a more positive attitude and posture about learning. They experienced enhanced abilities to focus, retain, and understand new material. One wrote, "By calming

myself down, I was able to absorb more material and learn more concepts without being overwhelmed." In addition, they experienced increased confidence in their ability to learn. As one student wrote, "The centering activities provided me a platform of a clear, sound mind to maximize my priority to learn effectively in class and after class. ...our centering activities cultivated an environment to achieve my best self during class." Another student noted the contrast between days with and without a centering activity: "Compared to days that we do a centering activity, I did feel slightly different when we didn't do one. When we didn't do a centering activity I felt unfocused and had trouble sitting still enough to read our article."

Two other students described slightly different aspects of enhanced engagement:

A. The centering activities created a sense of calm in me and, most importantly, stopped the multitasking that I am almost always engaged in. Generally, as I listen to lecture, I am writing notes on my calendar, jotting down questions I need to answer for other classes, thinking about family responsibilities I need to take care of that night. But the five minutes of centering allowed that litany of thoughts to stop. I became aware of the fact that it was okay to spend the next few hours thinking only about what was right in front of me. With that clarity, I could take in the information being presented in a much more thoughtful way, and I could fully participate in the in-class discussions and activities.

B. My anxiety was reduced, so I could pay attention and participate more. The centering exercises indicated to me that our instructor cared about us, and that made me feel confident about learning and participating in the class. This instructor's classroom felt like a safe harbor, and motivated me to want to work and learn.

Team cohesion

Students described aspects of interpersonal relationships that promoted team building and making effective connections with peers in the learning environment or during the learning experience. Students described enhanced trust between students and the instructor, as well as with each other. Relationships were strengthened as tension decreased and genuine bonding and enhanced communication occurred during interactions and group activities. As one student said, "I felt the exercise (centering) created trust between the instructor and the group." Another reported that the centering exercises "also helped me to engage more with my peers, which had a direct effect on my learning as well."

Two other students also described enhanced team cohesion:

A. I liked that we all did them together, as it improves the intimacy of the group to all sit together with our eyes closed and minds focused on the same thing for a few minutes. It helped me to feel closer and more bonded with my classmates and the teacher. This allowed me to be more comfortable participating in group work and speaking to classmates, which is a great way to promote learning.

B. First, it (centering) reduced our in-class tension. Discussions and test reviews were noticeably calmer and free of incivility than previous college courses I had attended.

Other findings

Students commented on the benefits of centering before exams and presentations and on being more relaxed and focused during these assessments. Some students also reported enhanced academic performance when practicing centering before their exam: "We... did it (centering) today before our last exam and I happened to do my best on this exam." Another student described her experience in more detail: Regular centering exercises have been of great benefit to me this term. Knowing that we could breathe, remain still and silent, or engage a video or audio clip designed to soothe and center became a source of strength, calm, and knowledge. I realized... that I tend to speed through tests, whether online on scantron or just for practice, like our Adaptive Quizzing. This speeding was a manifestation of a real nervousness. Since then (participating in centering), I have been working on becoming a more mindful test-taker, taking time to find a comfortable test-taking space, a relaxed posture, and a mindful moment before embarking on the journey.

Discussion

The findings indicate that centering promoted a fertile environment for individual and peer engagement and learning during educational activities inside and outside of the classroom. Students appreciated and valued the practice of performing centering activities before starting class. In addition, even students who began the semester uncertain about the usefulness of centering activities realized the effectiveness of the centering activities on their stress, anxiety, and learning. These findings are consistent with existing nursing and higher education literature [12,20,21]. Although objective evidence was not gathered to confirm the impact on academic performance, centering positively impacted the cognitive, emotional, and behavioral conditions students needed to perform well academically. These results confirm existing research that centering in the academic setting is an effective intervention in managing stress, anxiety, and learning barriers in the nursing student population [5,18,19].

Several limitations deserve mention. This project was conducted among prelicensure students in an urban private health sciences university. Although there was adequate representation among age groups, there was a lack of racial/ethnic and gender diversity. The response rate of 70% was admirable, yet we are unsure how the overall tenor of the results would have changed if data were available from students who chose not to respond and from those whose data were collected but were not accessible.

Implications

Optimal health is essential to the academic performance of nursing students, as well as to their professional development. High levels of stress and anxiety can impact the learning environment, preventing optimum academic performance. Integrating

interventions that help students manage stress and anxiety can create an improved learning environment that helps nursing students academically and professionally in their careers. This project provides evidence that good management of stress and anxiety can improve transitioning into learning mode, engagement, and team cohesion, along with the myriad benefits reported in other studies. Faculty who want to use centering as a tool to enhance student learning and engagement in the classroom should embark on a systematic journey to prepare and enhance their knowledge related to centering.

This journey should include:

- a. Participating in retreats, seminars, webinars, etc., to enhance one's theoretical knowledge about meditation and mindfulness
- b. Developing a personal daily meditation or mindfulness practice
- c. Introducing centering activities with students for which faculty have skill and passion
- d. Evaluating the effectiveness of centering activities with students at least at midterm (informally) and at the end of the course (formally)

Suggestions for future research include the use of longitudinal designs that involve larger and more diverse student populations and data collection through licensure and the first year as a new nurse. The use of objective measures for stress, anxiety, depression, engagement, conflict resolution, team functioning, self-esteem, confidence, and problem-solving would be informative regarding how to further support student success.

Conclusion

This study confirmed that centering activities at the start of class resulted in reduced stress and anxiety and improved concentration for students. In addition, students experienced benefits not yet reported in nursing literature that included enhanced transitioning into learning mode, engagement, and team cohesion. The findings support centering as a useful intervention for students at the beginning of class periods. Students may experience immense stress to perform academically, and nurse educators may see benefits in engaging students in activities that improve their stress levels and well-being both in and out of the academic setting, during and after their time in academia.

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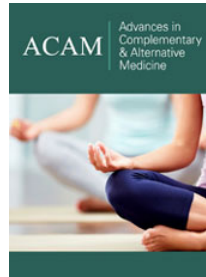
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