

**Drexel University**

**Research Brief no. 7**

Exploring the Effects of an Open Access Mindfulness Course on Online Graduate Student Persistence,  
Stress, and Mind Wandering: A Mixed Methods Explanatory Sequential Study

By

Jackie Murphy  
EdD Student  
Drexel University

Supervising Professor:  
Dr. Kristen Betts

Editors:

Dr. Penny L. Hammrich  
Professor and Dean

Dr. Rajashi Ghosh  
Associate Professor and Department Chair for Policy, Organization, and Leadership

Dr. Kathy Geller  
Associate Clinical Professor

Katelyn Alderfer  
PhD Student

Christine Galib  
EdD Student

Copy Editor:

Anthony Hopkins  
Director of Marketing and Communications

# **Exploring the Effects of an Open Access Mindfulness Course on Online Graduate Student Persistence, Stress, and Mind Wandering: A Mixed Methods Explanatory Sequential Study**

Jackie Murphy

Drexel University

## **Abstract**

Graduate online students often must juggle the demands of graduate school with work and families. These competing demands can lead to increased levels of perceived stress, which can increase mind wandering and potentially impact academic performance. Mindfulness is a practice that has been shown in the literature to decrease levels of perceived stress and mind wandering, therefore, the integration of mindfulness practice could have a positive effect on students' academic success and persistence. The purpose of this explanatory sequential study was to examine explore the impact of teaching mindfulness to online graduate students. The preliminary findings of this study have important implications for higher education institutions.

## **Aim**

The purpose of this explanatory sequential dissertation was to examine relationships between, and factors related to student self-reported perceived stress, mind wandering, and persistence (i.e., degree/ institutional commitment) and to explore the impact of teaching mindfulness to online graduate students.

## **Problem**

Persistence for non-traditional students enrolled in graduate education is a challenge due to stress which can decrease attention, increase mind wandering, and affect academic performance; therefore, research is needed on the effects of implementing mindfulness in online graduate programs.

**Research Questions:** This mixed-methods study aimed to answer the following research questions:

1. Are online graduate students' self-reported levels of stress, mind wandering, and persistence significantly related?
2. Are there significant differences in online graduate students' self-reported levels of stress, mind wandering, and persistence when comparing before and after completion of an open-access mindfulness course?
3. What are the perceptions of online graduate students who complete an online open access mindfulness course?
4. What factors do online graduate students identify as contributing to stress, mind wandering, and persistence?

## **Significance**

Retention is often a challenge with online graduate students, who are typically juggling multiple responsibilities outside of school, including full or part-time employment and families (Muljana & Luo,

2019). These competing demands often lead to increased levels of stress. In 2017, a survey conducted by the American College Health Association (ACHA) of over 14,000 graduate students found that 59.8% experienced higher than average stress rates and one in five reported that the stress impacted their academic performance. Increased stress can lead to an increase in mind wandering and a decrease in focus. If an individual does not recognize that their mind has wandered or becomes consumed by the unrelated thought, attention in the present moment will significantly decline. Therefore, mind wandering likely has a negative impact on academic performance and potentially student persistence.

Mindfulness is defined as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 2013, p. xxvii). Several of the benefits of mindfulness that can be readily found throughout published research includes decreased levels of perceived stress (Hölzel et al., 2012) and decreased mind wandering (Bennike, Wieghorst, & Kirk, 2017). Given these benefits, mindfulness integrated into online higher education may improve students’ levels of stress and mind wandering, allowing students to be more focused on the course content and, may as a result, increase retention.

### **Preliminary Research Findings**

Graduate online students in the College of Nursing and Health Professions and the School of Education at one large private urban university located in the northeastern region of the United States were invited to participate in this study. Thirty-one online graduate students completed a pre-survey and Module One of an open access course titled, “Mindfulness and Optimal Performance.” Students had three weeks to complete Module One and then were emailed a post-survey. The pre-and post-surveys included valid and reliable instruments to measure self-reported scores of perceived stress, mind wandering, and persistence. Specifically, the College Persistence Questionnaire (CPQ) (Davidson et al., 2009) was used to measure persistence. For the CPQ, researchers found that the questions specifically related to institutional commitment and degree commitment best predicted persistence, so those specific questions were utilized in the study surveys to measure perceived persistence. Additionally, six participants completed a one-on-one Zoom interview.

Quantitative data were analyzed using dependent paired t-tests and Pearson correlations, and yielded four results:

- Self-report scores of both mind wandering and perceived stress were significantly lower following the completion of Module 1.
- Self-reported perceived persistence levels after Module 1 were significantly higher for students in the first or second quarter of their graduate program.
- A significant, positive correlation was found between levels of perceived stress and mind wandering on the pre- and post-surveys. Ultimately, an increased level of perceived stress was associated with an increased level of mind wandering.
- A significant, negative relationship was found between mind wandering and persistence on the post-survey. Therefore, increased mind wandering was associated with decreased persistence with the post-survey data.

Qualitative data is being analyzed using first and second-cycle coding. Preliminary results show that overall, the students interviewed indicated that Module 1 provided a good foundation of mindfulness that taught them how to note that their mind had wandered, and focus on the present

moment. A common factor that emerged related to persistence, mind wandering, and stress was their challenges in having to balance multiple commitments including work, school, and family.

### Conclusion

After analyzing the quantitative and qualitative data findings, three results emerged preliminarily.

- An open access course that provides foundational mindfulness education, without formal meditations, can positively impact self-report levels of perceived stress and mind wandering.
- Self-reported perceived persistence may be increased for students who are early in their academic studies.
- Balancing multiple commitments is a common factor affecting persistence, stress, and mind wandering.

### Recommendations

First, an open access mindfulness course should be offered to all students upon acceptance into their online graduate program. The students interviewed described that the course provided an excellent foundation of mindfulness in an easy-to-understand and accessible manner. Second, when creating an open access mindfulness course, it is important to include short, engaging resources with practical strategies that students can immediately apply.

### References

- American College Health Association. (2017). *National college health assessment II: Graduate/professional reference group executive summary, spring 2017*. Hanover, MD: author. Retrieved from [http://www.acha-ncha.org/docs/NCHA-II\\_SPRING\\_2017\\_GRADUATE\\_REFERENCE\\_GROUP\\_EXECUTIVE\\_SUMMARY.pdf](http://www.acha-ncha.org/docs/NCHA-II_SPRING_2017_GRADUATE_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf)
- Bennike, I.H., Wieghorst, A. & Kirk, U. (2017). Online-based mindfulness training reduces behavioral markers of mind wandering. *Journal of Cognitive Enhancement*, 1(2), 172-181. <https://doi.org/10.1007/s41465-017-0020-9>
- Davidson, W. B., Beck, H. P., & Milligan, M. (2009). The college persistence questionnaire: Development and validation of an instrument that predicts student attrition. *Journal of College Student Development*, 50(4), 373-390. doi:10.1353/csd.0.0079
- Hölzel, B. K., Carmody, J., Evans, K. C., Hoge, E. A., Dusek, J. A., Morgan, L., . . . Lazar, S. W. (2010). Stress reduction correlates with structural changes in the amygdala. *Social Cognitive and Affective Neuroscience*, 5(1), 11-17. doi: 10.1093/scan/nsp034
- Kabat-Zinn, J. (2013). *Full catastrophe living. Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Bantam Books.
- Muljana, P.S., & Luo, T. (2019). Factors contributing to student retention in online learning and recommended strategies for improvement: A systematic literature review. *Journal of Information Technology Education: Research*, 18, 19-57. doi:10.28945/4182

### Author Biography

Jackie Murphy is an EdD student studying the effects of an open access mindfulness course on student persistence, stress, and mind wandering. She is expected to graduate from Drexel University in June 2020. Jackie is a registered nurse with a clinical background in pediatrics. She has been teaching in higher education for the past 13 years and is currently an Assistant Clinical Professor in the College of Nursing and Health Professions. Specifically, Jackie teaches students in the Graduate Nursing and Complementary and Integrative Health Programs. Additionally, Jackie is a certified Meditation and Mindfulness Teacher.