Our Bodies as Metaphor: Using Yoga to Foster Psychological Flexibility in the College Classroom

Paola Ricardo, M.A., Ashlyne Mullen, M.S., Jennifer Block-Lerner, Ph.D., & Donald R. Marks, Psy.D. Department of Advanced Studies in Psychology, Kean University

Introduction

Yoga involves the practice of being present with one's mind and body, usually through movement, and accepting emotions and sensations as they are in each unfolding moment. Recent research has found yoga to be a beneficial treatment, leading to improvements in anxiety, depression, panic, sleep, and overall quality of life (Khalsa et al., 2015). Additionally, yoga has been shown to help develop mindfulness and decrease experiential avoidance (Dick et al., 2014). However, receptivity to yoga and other mindfulness practices has been mixed (Bock et al., 2012; Olano et al., 2015). The current study offers an alternative method of delivering yoga by incorporating postures and related practices in a curriculum-based workshop, with a focus on connecting acceptance and commitment therapy (ACT) to movement practices.

Method

Participants

• Undergraduate psychology students at a large northeastern university from psychology and communication classes (N = 109) during fall 2017 and spring 2018 semesters.

Measures

- Acceptance and Action Questionnaire II (AAQ-II; Bond et al., 2011)
- Feedback form
 - Participants were given investigator-created feedback forms following the
 workshop session. The feedback form had open-ended short answer as well as
 Likert-type questions about their experience in the intervention, what
 components they found most and least helpful, as well as receptivity. Receptivity
 was assessed via items about individuals' interest in additional practice and
 related services. Cronbach's alpha for this measure has been reported at .93
 (Moran-Harold, 2016).
 - Open-ended questions were also asked related to most helpful, least helpful, and overall receptivity to the workshop.

Intervention Components

- This study is part of a larger project assessing the value of two different ACT-based curriculum-grounded interventions
- Intervention participants received the intervention in their classroom during class time.
- Intervention sessions were approximately 1.5 hours. Measures (paper and pencil) were administered the class before the intervention, the class following the intervention, and at 4-5 weeks post intervention, resulting in three time points.
- The ACT with yoga workshop involved:
 - exercises that foster exploring and clarifying values
 - examining ways that we are often on "automatic pilot" in daily life activities
 - increasing present moment awareness including through the practice of mindful
 - introducing experiential acceptance as a potentially useful stance toward difficult life experiences with incorporated yoga postures (e.g. mountain pose, tree pose)
 - related activities (e.g. breathing focusing on three chambers of the lungs, also known as "three part breath") that aimed to convey these processes via fuller-body engagement

Data Analyses

- Paired samples *t*-tests were used to compare means of pre- to follow-up AAQ-II scores.
- Mean of receptivity items on feedback form was examined.
- Qualitative responses to questions about most and least helpful elements of the intervention were coded for analysis.

Results

- AAQ-II was found to be significantly different from pre- to follow-up workshop, t(87) = 2.787, p = .007, but not from pre- to post-workshop t(87) = -1.594, p = .115.
- Relatively high levels of receptivity to the workshop (M = 3.94, SD = .90 [five-point scale])
- 108 of 109 (99%) participants who participated in the workshops reported a positive experience and/or interest in the workshop.

Themes on Qualitative Responses

Helpful	
Relatable	
Connected to breath	
Interesting	
Relaxing	
Calming	



Qualitative Responses

- "It was a new experience learning new things. It made me think about (my) life in a different way."
- "I initially thought yoga was for 'hippies' and vegans and unnecessary, but this workshop changed (my) thoughts."
- "I really enjoyed the workshop. It makes you stop and think and be in the present."
- "I really liked the workshop, especially bringing up that we are on autopilot, because I usually am. Sometimes you need to hear that you need to be more relaxed and learn ways to do that is especially important. I'm glad to be part of this."
- "It was helpful enjoyed the breathing techniques."
- "I was interested in this whole study and activity."

Implications

- Results suggest that psychological flexibility may increase as a result of the ACT with yoga workshop. It could be that incorporating movement fosters experiential awareness, thus leading to an increase in psychological flexibility and openness.
- The results of this work also support receptivity toward and interest in short-term mindfulness-based interventions implemented in the classroom. Additionally, the themes reflected in participants' qualitative responses provide insight into specific components and practices that may be beneficial to implement in the classroom.

References

- Bock, B. C., Fava, J. L., Gaskins, R., Morrow, K. M., Williams, D. M., Jennings, E., & ... Marcus, B. H. (2012). Yoga as a complementary treatment for smoking cessation in women. *Journal of Women's Health*, *21*(2), 240-248. doi:10.1089/jwh.2011.2963
- Dick, A. M., Niles, B. L., Street, A. E., DiMartino, D. M., & Mitchell, K. S. (2014). Examining mechanisms of change in a yoga intervention for women: The influence of mindfulness, psychological flexibility, and emotion regulation on PTSD symptoms. *Journal of Clinical Psychology*, 70(12), 1170-1182. doi:10.1002/jclp.22104
- Khalsa, M. K., Greiner-Ferris, J. M., Hofmann, S. G., & Khalsa S. S. (2015). Yoga-enhanced cognitive behavioural therapy (Y-CBT) for anxiety management: A pilot Sstudy. *Clinical Psychology*, 22(4), 364-371.
- Olano, H. A., Kachan, D., Tannenbaum, S. L., Mehta, A., Annane, D., & Lee, D. J. (2015).
 Engagement in mindfulness practices by U.S. adults: Sociodemographic barriers. *The Journal of Alternative and Complementary Medicine*, 21(2), 100-102.
 doi:10.1089/acm.2014.0269