



Mindfulness and Technology: Evaluating An Online Mindfulness Intervention for Symptoms Related to Sexual Assault

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Abstract

Sexual assault has been found to increase the risk of distressing psychological symptoms including Post-traumatic Stress Disorder (PTSD) and experiential avoidance. As such, interventions for reducing the distress and negative impacts of sexual assault are of importance. Mindfulness is of particular interest as it addresses one of the prominent factors known to maintain psychological distress after trauma, experiential avoidance (Polusny et al., 2004; Merwin et al., 2009). Furthermore, an online mindfulness-based intervention can increase the accessibility and reduce the barriers to treatment. A within subjects repeated measures open clinical trial design was used to investigate the effectiveness of an online mindfulness based intervention for trauma related symptoms among college students. Specifically, the impact of an eight-week online mindfulness-based intervention has on mindfulness, experiential avoidance, and PTSD using self-report measures was evaluated. Results of the current study support the use of an online mindfulness-based intervention for reducing PTSD symptoms, experiential avoidance, and in increasing mindfulness skills among college students.

Participants

A sample of 10 students currently enrolled at a Midwestern university participated. On average participants' age was 20.80 ($SD = 1.87$). The majority of the participants identified as a woman ($n = 9$) with one participant identifying as male. Eighty percent of the sample identified as white ($n = 8$) with the remaining 20% ($n = 2$) of participants identifying as black. The majority of the sample identified as heterosexual ($n = 6$), with a few identifying as bisexual ($n = 3$) and one reporting questioning.

Method

Participants provided informed consent to participate. Participants completed an 8-week online mindfulness-based intervention based on MBSR. Modules consisted of psychoeducation and 10-15 minute mindfulness exercises. Participants completed a large battery of assessments and questionnaires throughout the duration of the study including at baseline and post-intervention. Assessments included:

- PTSD checklist for DSM-5 (PCL-5; Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013)
- Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006)
- Multidimensional Experiential Avoidance Questionnaire-30 (MEAQ-30; Sahdra, Ciarrochi, Parker & Scrucca, 2016)

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Hypotheses

- Participants will have a significant reduction in PTSD symptoms when comparing baseline and post-intervention PCL-5 scores.
- Participants will have a significant reduction in experiential avoidance when comparing comparing baseline and post-intervention MEAQ-30 scores.
- Mindfulness will significantly increase when comparing participant scores on the FFMQ at baseline and post-intervention.

Tables of Repeated Samples t – Test

Summary of t -tests comparing baseline and post-intervention scores.

Assessment	t (df)	p	d
PCL-5	3.49(9)	0.01	1.11
FFMQ	3.20 (9)	0.01	0.95
MEAQ-30	-4.28 (9)	0.00	1.35

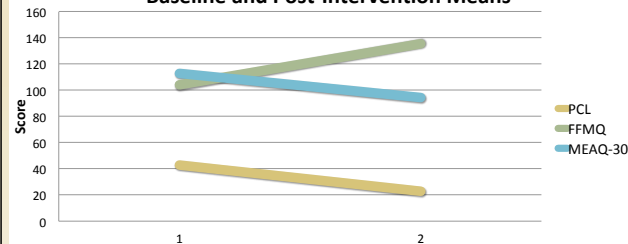
Note: PCL-5 = PTSD checklist for DSM-5; MEAQ-30 = Multidimensional Experiential Avoidance Questionnaire-30; FFMQ = Five Facet Mindfulness Questionnaire

Baseline and post-intervention means and SDs

Assessment	Baseline	Post-Intervention
	M (SD)	M (SD)
PCL-5	42.70 (17.95)	22.70 (19.60)
FFMQ	104.00 (17.86)	135.70 (24.21)
MEAQ-30	112.60 (19.11)	94.40 (27.20)

Note: PCL-5 = PTSD checklist for DSM-5; MEAQ-30 = Multidimensional Experiential Avoidance Questionnaire-30; FFMQ = Five Facet Mindfulness Questionnaire

Baseline and Post-Intervention Means



Results

- There was a significant reduction in PTSD symptoms when comparing baseline and post-intervention scores on the PCL-5.
- There was a significant reduction in experiential avoidance when comparing baseline and post-intervention scores on the MEAQ-30.
- There was a significant increase in mindfulness when comparing baseline and post-intervention scores as measured by the FFMQ.

Discussion and Future Implications

- Findings support the use of a brief online mindfulness-based intervention for college students who have symptoms related to sexual assault.
- Findings support the hypotheses that participants would experience a significant reduction in PTSD symptoms, experiential avoidance, and an increase in mindfulness.
- Findings support the notion that experiential avoidance is a particular important factor to target when addressing PTSD symptoms (Polusny et al., 2004; Merwin et al., 2009).
- This study is not without limitations. The sample size is small and consists only of college students. Therefore, the generalizability of the results is limited. The results may not generalize to more severe psychological comorbidities including suicidal ideation, psychosis, and severe substance use. In addition, resources to access an online intervention may be more limited in a non-college sample. The current study did not include a control condition. Therefore, additional variables such as time were not controlled for which limits the ability to attribute the change in symptoms to be caused by the introduction of the mindfulness intervention.
- Future research should investigate an online mindfulness-based intervention with a larger sample size, a waitlist control condition, and a sample with more severe psychological comorbidities.
- Clinically, the findings of the current study provide promise for the use of a brief online mindfulness intervention for symptoms related to sexual assault. This intervention may reach individuals who are less likely to seek traditional mental health treatment and may provide individuals with PTSD symptoms the skills and tools to target and reduce PTSD symptoms and experiential avoidance, which may assist in greater treatment engagement in the future. In addition, this intervention may be a useful adjunctive treatment option.