



The Effectiveness of a Mindfulness-based Online Intervention to Lower Distress in Public University and Community College Settings

Viann Nguyen-Feng, MPH, Christiaan Greer, Liza Meredith, Kelli Howard, Jacob Paulsen, Therese Bermingham, and Patricia Frazier, PhD
Department of Psychology, University of Minnesota, Minneapolis, MN, USA

UNIVERSITY
OF MINNESOTA

Introduction

Background

- College students are highly stressed; the American College Health Association (2012) states that 86% of college students reported feeling *overwhelmed* in the past year
- Self-help internet-based interventions are effective for treating depression and anxiety (Newman et al., 2010; Spek et al., 2007)
- Near all of these interventions use cognitive-behavioral therapy (CBT) techniques
- Previous studies have found that an intervention focused on increasing perceived control was effective in decreasing stress, depression, and anxiety (Hintz et al., 2014)

Specific Aims

- Aim #1:** Assess the effectiveness of a mindfulness-based online intervention in lowering distress in public university and community college students
- Aim #2:** Assess the effectiveness of adding a mindfulness component to the present control intervention

References

ACHA. (2012). Reference group executive summary. Retrieved from http://www.acha-ncha.org/docs/ACHA-NCHAI_ReferenceGroup_ExecutiveSummary_Fall2011.pdf

Hintz, S., Frazier, P. A., & Meredith, L. (2014). Evaluating an online stress management intervention for college students. *Journal of Counseling Psychology*.

Newman, M. G., Szkodny, L. E., Llera, S. J., & Przeworsky, A. (2010). A review of technology-assisted self-help and minimal contact therapies for anxiety and depression: Is human contact necessary for therapeutic efficacy? *Clinical Psychology Review*, 31, 89-103.

Spek, V., Cuijpers, P., Nyklíček, I., Riper, H., Keyzer, J., & Pop, V. (2007). Internet based cognitive behaviour therapy for symptoms of depression and anxiety: A meta-analysis. *Psychological Medicine*, 37, 319-328.

Methods

Participants

- Public university students ($N = 103$)
- Community college ($N = 73$)
- Recruited from psychology classes
- Both samples were primarily female (60-69%) and White (63-68%)
- Age was the only demographic that differed between the groups, $\chi^2 = 15.32, p < .001$ (18-21 years: 72% for Public university vs. 43% for Community college)

Materials

Online Stress Management Intervention: All participants completed the 3 modules of the Present Control Intervention which contains:

- Videos of an expert talking about research on stress and perceived control
- Videos with information from other students
- Online exercises

The present control group then completed 3 stress logs, in which they wrote about what they did and did not have control over with regard to stressors in their lives. The mindfulness group completed 3 mindfulness exercises and logs.

Outcome Measures: Depression Anxiety Stress Scales (DASS), completed pre and post intervention

Procedure

- Participants were randomly assigned to 1 of 3 groups: Present control, Present control + Mindfulness, Present control + Enhanced stress log

Results

- Only the Present control and the Present control + Mindfulness conditions are presented for the purposes of this poster

Within Group Effect Sizes, d

	Public University	Community College
Present control		
DASS Depression	0.02 (ns)	0.14 (ns)
DASS Anxiety	0.04 (ns)	0.55
DASS Stress	0.02 (ns)	0.44
Present control + Mindfulness		
DASS Depression	0.24	0.16 (ns)
DASS Anxiety	0.21	0.46
DASS Stress	0.32	0.42

Outcome Measures, Present control + Mindfulness

	Pre (mean)	Post (mean)	p -value
Public University			
DASS Depression	5.54	4.10	.004
DASS Anxiety	6.23	4.74	.009
DASS Stress	5.88	4.52	.01
Community College			
DASS Depression	5.47	3.79	.003
DASS Anxiety	4.47	3.28	.03
DASS Stress	8.24	5.54	.001

Discussion

Overall Findings

- Aim #1:** Participants in both samples significantly ($p < .05$) decreased their distress, with mean within-group effect sizes of $d = 0.26$ (public university) and $d = 0.43$ (community college). The groups had similar completion rates (73% and 67%, respectively)
- Aim #2:** Those in Present control + Mindfulness decreased their distress more than Present control only, but only in the Public university sample

Strengths

- Unique intervention approach via use of online technology
- Online intervention used a mindfulness approach instead of the more typical CBT
- Study sample consisted of both traditional and non-traditional students

Limitations

- Unable to determine accuracy of self-reports or intervention completion
- Long-term treatment effects not measured

Implications

- Analysis is needed to compare these interventions to a mindfulness-only one
- Mindfulness-based online interventions may be a useful and cost-efficient tool in lowering distress in different types of college settings