MINDFULNESS, EMOTION REGULATION, AND RESPIRATORY SINUS ARRHYTHMIA: A PRELIMINARY INVESTIGATION INTO THE EFFECTS OF MINDFULNESS PRACTICE IN A CLINICAL POPULATION

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Researchers have shown that mindfulness based therapies, such as Dialectical Behavioral Therapy (DBT), are effective treatments in trans-diagnostic clinical populations with emotion dysregulation. Researchers have yet to determine the effect of mindfulness-based therapies on respiratory sinus arrhythmia (RSA), a physiological measure associated with emotion dysregulation. In this study, we examine associations between mindfulness, RSA, and emotion regulation in a group of participants currently in therapeutic treatment for psychopathology associated with emotion dysregulation.

Methods: Six participants completed interview and self-report measures of psychopathology and emotion dysregulation, and physiological measures during a baseline and mindfulness task.

Results: Major Depressive Disorder (MDD) and Borderline Personality Disorder (BPD) were correlated with deficits in emotion regulation. Antisocial Personality Disorder (ASPD) was not. RSA was not associated with reports of psychopathology or emotion dysregulation. However, across diagnoses and emotion regulation deficits, RSA increased during a brief mindfulness task.

Discussion: Even very brief mindfulness instruction appears to be effective at raising RSA across diagnoses and emotion regulation deficits. A conceptualization of mindfulness that parallels facets of emotion dysregulation would prove useful in evaluating why this treatment is efficacious across diagnoses and emotion regulation difficulties. RSA and other physiological measures of the autonomic nervous system offer an avenue for exploring such mechanisms. Further, researchers should seek to understand whether increases in RSA due to mindfulness instruction are associated with improvements in psychopathology and emotion regulation. The results presented in this paper are part of a larger study exploring associations between the autonomic nervous system, emotion dysregulation, psychopathology, and mindfulness.