

Original Article:

**THE EFFECTS OF MINDFULNESS-BASED STRESS
REDUCTION IN THE HIGHER EDUCATION WORKPLACE:
A PILOT STUDY**

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Abstract

High stress levels in the workplace can lead to negative psychological, emotional, and physiological experiences in employees such as increased somatic symptoms and decreased productivity. Previous studies have illustrated the importance of reducing stress to avoid burnout and negative health outcomes. Mindfulness-Based Stress Reduction (MBSR) is an 8-week group intervention curriculum that has reduced unhealthy attitudes and mitigated the effects of stress in previous research. The present study aimed to evaluate the effects of MBSR on research university faculty and staff ($n = 18$). Pre- and post-MBSR measurement included self-report measures of burnout, mindfulness, perceived stress, and psychological distress. Results indicated significant changes in self-reported levels of mindfulness, perceived stress, and psychological distress from pre- to post-intervention; participants did not report significant changes in self-reported measures of burnout over time. This study suggests that applying mindfulness techniques in a workplace may improve employees' mental health; future research utilizing control conditions is called for to better elucidate the results presented herein. Additionally, the potential benefits of MBSR should be explored in underrepresented populations in order to promote equal access to psychological care, and therefore improved well-being and reduced stress.

Keywords: Mindfulness-Based Stress Reduction, burnout, stress, staff, mindfulness

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INTRODUCTION

Faculty and staff employed at collegiate institutions often encounter situations that lead to high levels of *stress* that can relate to occupational *burnout* (Lackritz, 2004). Occupational burnout has been operationalized as a syndrome induced by stress that can be compartmentalized into three dimensions, including: emotional exhaustion, depersonalization, and diminished personal achievement (Papathanasiou, 2015). The workplace can particularly be fraught with demanding conflicts that generate little emotional compensation (Harrison, 1999), and educational professionals may uniquely experience stressful classroom dynamics, which can include disruptive behavior (Flook et al., 2013). The effects of the interaction between stress and burnout for educational professionals are associated with high turnover rates (Flook et al., 2013). Further, unfavorable relationships with other staff members and students can exacerbate negative psychological conditions such as stress, and those working closely with students are at higher risk for experiencing burnout (Lackritz, 2004).

Lazarus and Folkman (1984) have outlined that stress is the outcome that results from ineffective *cognitive appraisal* and *coping* between an individual and their environment. Cognitive appraisal has previously been defined as how one connects an experience to their own well-being, while coping is marked by the efforts to deal with challenges (Folkman et al., 1986). Daily stressors from work, such as heavy workloads or a lack of emotional reward, can induce fatigue as well as diminish well-being (Lackritz, 2004). Overall, the universal experience of stress is thought to occur when an individual assesses that their coping resources are not adequately developed to successfully navigate the perceived threat within the environment (Furman et al., 2018; Lazarus & Folkman, 1984).

Prolonged stress can lead to the experience of occupational burnout which can be detrimental to professional efficacy and can promote negative mental health symptoms such as depression and anxiety (Hendel & Horn, 2008; Papathanasiou, 2015). Indeed, the ability to cope with stressors and demands diminishes over time and is associated with decreased job satisfaction (Flook et al., 2013; Lackritz, 2004). Health issues (e.g., cardiovascular disease and immunodeficiency disorders) are more prevalent among individuals with high levels of burnout (Hendel & Horn, 2008). In addition, stress can also promote a more negative outlook towards life and increased difficulty with interpersonal relationships (Papathanasiou, 2015). In sum, burnout and stress can negatively impact perceived happiness, physical health, and coping behaviors, thus enforcing the need for feasible and efficacious strategies to remediate these negative experiences.

Among the armamentarium of approaches to impact stress and burnout is the use of *mindfulness* (Bishop, 2002). Mindfulness has previously been defined as a sense of focused attention on present experiences with non-judgmental awareness and acceptance (Kabat-Zinn, 2003; Lamothe et al., 2016). *Mindfulness-Based Stress Reduction* (MBSR) is an intervention that teaches mindfulness-based strategies designed to promote the self-

regulation of thoughts, feelings, and attention which, in turn, can reduce stress. Originally developed to improve life quality for individuals with chronic pain conditions, MBSR has been extended to numerous other clinical and non-clinical populations to support health behaviors and outcomes via stress reduction (Bohlmeijer et al., 2010; Khoury et al., 2015).

The use of mindfulness interventions targets common symptoms encountered in the workplace, such as emotional distress and negative thinking patterns, in order to decrease burnout (Bishop, 2002). Observing emotions in the present moment without trying to change them or alter the overall experience allows participants to be less affected by burnout (Flook et al., 2013). Previous studies have found that MBSR is useful for targeting stress sensitivity while increasing stress management for populations such as those with chronic pain, professionals in the field of health services, and those with anxiety (Janssen et al., 2018; Shapiro et al., 2005). One study (Frank et al., 2015) conducted research on occupational stress using a quasi-experimental comparison of high school teachers who completed the MBSR program and a control group of high school teachers who did not participate. The treatment group reported higher levels of self-kindness, improvements in sleep quality, and enhanced efficacy in remaining present after the conclusion of the intervention (Frank et al., 2015). Overall, the growing body of research suggests that MBSR contributes to decreased feelings of perceived stress amongst these professionals, as well as an increase in self-compassion.

While previous research provides support of MBSR as a potentially useful strategy to decrease levels of perceived stress and burnout, it is important to understand the mechanistic underpinnings of how mindfulness-based interventions influence change. More specifically, Shapiro et al. (2006) have provided a theory on the mechanisms of mindfulness that denote three fundamental axioms, intention, attention, and attitude (IAA), allowing one to fully experience the present moment. Intentions guide the purpose of practicing mindfulness and have the ability to shift over time (Kabat-Zinn, 1990). Attention, on the other hand, is the observation of current experience and is correlated with increased ability for vigilance, switching attention, and cognitive inhibition (Shapiro et al., 2006). Attitude is a quality of attention based on the commitment to mindfulness that determines one's capacity for enduring negative experiences (Shapiro et al., 2006). The IAA model outlines that intentional attention with a non-judgmental attitude can lead to re-perceiving, a mechanism marked by a shift in perspective that allows one to step back from their experiences to view information objectively (Shapiro et al., 2006). Re-perceiving is overall paramount in the mindfulness process with focused intentions, attention, and attitude. Overall, the IAA model encompasses each facet of mindfulness mechanisms and allows for a clearer understanding of how the combination of intention, attention, and attitude can prompt change.

The current study aims to expand upon existing research exploring the benefits of MBSR in collegiate faculty and staff. The study's *a priori* hypotheses predict that the

implementation of MBSR for university faculty and staff will reduce psychological distress, increase mindfulness, and decrease occupational burnout and perceived stress.

METHOD

Settings, Participants, and Recruitment

This study received IRB approval prior to its commencement. Participants included faculty and staff employed by a large private research university in a small city located in the Northeast United States. Emails were sent out to all faculty and staff members, advertising the intervention as a part of a wellness initiative through the university's human resources department. MBSR was implemented weekly in a classroom on campus and also included practices and strategies for participants to apply at home. Inclusion criteria were that individuals be full-time staff or faculty employees of the university; there were no exclusion criteria.

Research Design, Sampling, and Compensation

This study employed a non-experimental longitudinal research design through the means of convenience sampling. Participants were given self-report questionnaires during the week of the program prior to beginning MBSR (i.e., pre-intervention), and during the last week of the program after the completion of MBSR (i.e., post-intervention). As compensation for involvement in this study, participants received a \$10 gift card for completing pre-intervention measures and a \$10 gift card for completing post-intervention measures.

Measures

Given this study's small sample size (see Results), this sample's internal consistency (e.g., Cronbach's alpha) was not calculated due to the unreliability of this calculation in sample sizes smaller than 30 (Samuels, 2015).

Psychological Distress. Participants were given the Brief Symptom Inventory-18 (BSI-18; Derogatis, 2001) in order to obtain an estimate of their perceived general distress. Score values are compared to nationally normed gender matched community samples, with higher scores indicating greater psychopathology. The total score Global Severity Index (GSI) indicates clinical significance and need for psychiatric diagnostic evaluation, and subscales Somatization, Depression, and Anxiety support diagnostic formulation. GSI scores range from 0 to 72 (Meachen et al., 2008), and scores greater than 17 and 20 (for males and females respectively) are considered clinically significant. The BSI-18 has strong psychometric properties, including internal consistency (alpha coefficients range from .74 to .89) and test-retest reliability (Derogatis, 2001).

Mindfulness. Faculty and staff completed two self-report inventories of mindfulness. The first, the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006), explores aspects of mindfulness including observing, describing, and acting. A high total mindfulness score demonstrates clinical significance with the aid of subscales Awareness, Non-judging of Inner Experience, and Non-reactivity to Inner Experience. Scores range from 39 to 195 (de Bruin et al., 2012). There is no normative information for FFMQ scores. The FFMQ has reported coefficient alphas ranging from .73 to .91 (Bohlmeijer et al., 2011).

The second mindfulness inventory, the Mindful Attention Awareness Scale Trait Version (MAAS; Brown & Ryan, 2003), measures the participant's level of mindfulness and awareness of surroundings through a 15-item scale. This questionnaire uses a 6-point Likert Scale which assesses scores on a scale of 1 (*almost always*) to 6 (*almost never*). Scores range from 15 to 90. There is no normative information for the MAAS scores. The reported coefficient alpha for the MAAS ranges from .80 to .87 (Brown & Ryan, 2003).

Burnout. Participants completed the Maslach Burnout Inventory-General Survey (MBI-GS; Maslach et al., 1996) as a measure of workplace burnout. The MBI-GS includes components on a continuum from engagement (i.e., the dedication to strong work performance accompanied by a high-energy state) to burnout. Further, the MBI-GS indicates the need for psychiatric evaluation following a high total score of burnout and high scores on the three subscales, which include Cynicism, Professional Efficacy, and Exhaustion (Maslach et al., 1996). Cynicism here refers to maintaining an attitude of indifference towards one's work in order to avoid stressors, while Professional Efficacy involves professional achievements, social and non-social, that relate to expectations (Maslach et al., 1996). The Exhaustion subscale measures expressions of exhaustion and feeling overwhelmed (Maslach et al., 1996). There are no indicated scores for determining clinical significance on the MBI-GS, and no normative sample scores have been reported (Maslach et al., 1996). Scores range from 0 to 96 (Mojsa et al., 2006). The reported reliability coefficients for the subscales are the following: .86 for Exhaustion, .83 for Professional Efficacy, and .75 for Cynicism (Schutte et al., 2000).

Stress. The Perceived Stress Scale (PSS; Cohen et al., 1983) was administered to obtain a measure of participants' level of stress in response to unpredictable and uncontrollable situations. The scale is based on the participant's perception of which situations can be characterized as stressful (Cohen et al., 1983). The PSS contains 10 items to assess participants' current psychological state in regard to these situations as well as any need for psychiatric evaluation (Cohen et al., 1983). Scores range from 0 to 40 (Wongpakaran & Wongpakaran, 2010). Normative PSS data from a representative sample is reported (Cohen et al., 1983), with a mean average of 12.1 for males ($SD = 5.9$) and 13.7 for females ($SD = 6.6$). This scale has a strong internal consistency, with coefficient alphas ranging from .84 to .86 (Lee, 2012).

Intervention: Mindfulness-Based Stress Reduction (MBSR)

The MBSR (Kabat-Zinn et al., 1992) program was implemented over the span of 8 weeks with 2-hour long weekly classes and a half-day, 5-hour retreat midway through the course. It was delivered by a licensed psychologist trained in mindfulness-based interventions and MBSR. Classes included basic mindfulness practices, yoga poses, discussions about mindfulness and its relation to stress, formal mindfulness practice, and daily home practice. MBSR sessions focused on themes such as body awareness, self-compassion, increasing stress resilience, and noticing automatic thoughts in order to identify and change maladaptive processes.

The MBSR intervention is designed to teach individuals to become more aware of, and relate differently to, emotions, thoughts, and body sensations. Further, the MBSR intervention aims to teach subjects to cultivate a non-judging attitude and discern observation of stimuli that enter the field of awareness as the stimuli are noticed. The practices that are a part of the MBSR intervention allow for subjects to have a greater awareness of the present moment and teach practitioners to let go of ruminations about the past or the future. Taken together, the MBSR intervention may teach subjects to learn to see their previously established habitual reactions to stress, and instead develop more adaptive and healthier ways of responding to stressors in the environment (Shapiro et al., 2005).

RESULTS

A total of 18 faculty and staff registered for MBSR and completed pre-intervention assessments; however fewer participants completed post-intervention assessments ($n = 11$). Comparing participants who completed pre- and post-intervention assessments ($n = 11$) to those who only completed pre-intervention ($n = 7$) using both parametric (independent sample t test) and nonparametric (Mann-Whitney U test) statistical tests did not find any differences in participants' pre-intervention scores on any dependent variable (all $ps > .05$). Participants ranged from ages 22 to 65 ($M = 49.9$) with 78% of participants identifying as women ($n = 14$) and 22% identifying as men ($n = 4$). All 18 participants identified as White. Participants were in a singular treatment group, as this study did not employ a control group.

Table 1 provides a description of averages, standard deviations, and statistical results for all measured outcome variables.

Table 1. Pre- to Post-intervention Results

| Measure | Pre-Mean (SD) | Post-Mean (SD) | T- or Z-Score | p-Value |
|-----------------------|----------------|----------------|---------------|---------|
| BSI-18 | | | | |
| Global Severity Index | 9.64 (6.50) | 5.91 (4.76) | -1.99 | .046* |
| Somatization | 2.67 (3.22) | 0.73 (1.10) | -1.20 | .230 |
| Anxiety | 5.67 (4.37) | 3.09 (3.59) | -1.85 | .064 |
| Depression | 4.61 (3.82) | 2.09 (2.17) | -2.10 | .036* |
| FFMQ | 107.27 (13.33) | 136.55 (16.23) | -3.40 | .003* |
| MAAS | 42.72 (9.43) | 52.55 (8.81) | -2.31 | .021* |
| MBI-GS | | | | |
| Cynicism | 11.36 (9.22) | 11.73 (8.68) | -.35 | .726 |
| Professional Efficacy | 27.00 (4.84) | 27.09 (3.59) | -.06 | .950 |
| Exhaustion | 11.91 (6.33) | 10.09 (8.41) | -.97 | .330 |
| PSS | 17.73 (7.04) | 12.27 (5.53) | 3.66 | .004* |

* $p < .05$

Note: BSI-18 = Brief Symptom Inventory-18; FFMQ = Five Facet Mindfulness Questionnaire; MAAS=Mindful Attention Awareness Scale; MBI-GS=Maslach Burnout Inventory-General Survey; PSS=Perceived Stress Scale. T-Score is used when data are normally distributed. Wilcoxon Z-score is used when data are not normally distributed.

Data Screening

The first step in data analysis was the examination of normality and identifying potential outliers. Many of the variables were found to violate the assumption of normality, with the exception of the FFMQ, the Professional Efficacy subscale of the MBI-GS, and the PSS, which had normal distributions. When the assumption of normality was violated, the nonparametric equivalent of the *t* test, the Wilcoxon ranked sum test, was performed. When the variables were normally distributed, a paired samples *t* test was performed.

Psychological Distress

Results suggest that BSI-18 Global Severity Index from post-intervention was significantly lower than pre-intervention, $Z = -1.99$, $p = .046$. A Wilcoxon ranked sum test demonstrated that there were non-significant differences on the Somatization subscale of the Brief Symptom Inventory-18 (BSI-18) from pre- to post-intervention, $Z = -1.20$, $p = .230$. Further analyses showed non-significant differences on the Anxiety subscale of the BSI-18 from pre- to post-intervention, $Z = -1.85$, $p = .064$. Significant differences were then found on the Depression subscale of the BSI-18 from pre- to post-intervention, $Z = -2.10$, $p = .036$. Figure 1 depicts the significant changes in psychological distress between pre- and post-intervention data.

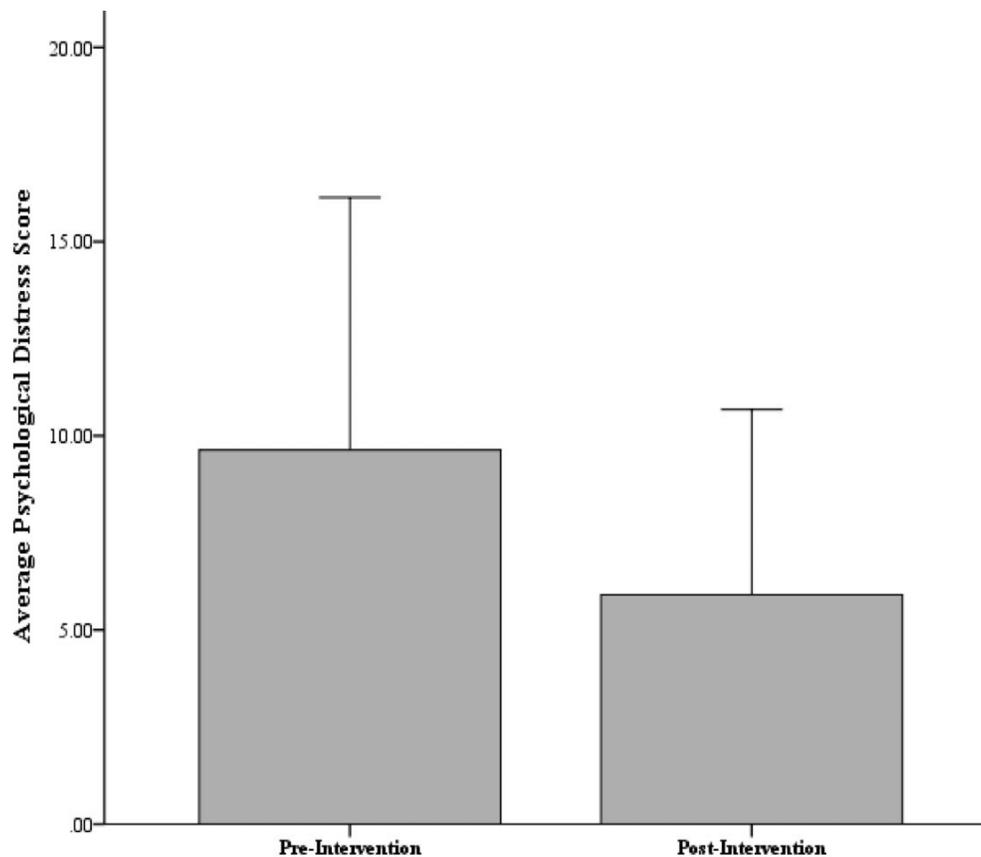


Figure 1. BSI-18 Severity of Symptoms: Pre-intervention to Post-intervention

Mindfulness

The Five Facet Mindfulness Questionnaire (FFMQ) was analyzed using a paired samples t test, and significant differences were found between pre- and post-intervention, $t(10) = -3.40$, $p = .003$. Results suggest that FFMQ scores from post-intervention were significantly higher than pre-intervention scores, as displayed in Figure 2. Additionally, upon analysis of the Mindful Attention Awareness Scale (MAAS) using a Wilcoxon ranked sum test, significant differences were observed between the pre- and post-intervention, $Z = -2.31$, $p = .021$. Results suggest that the MAAS scores from post-intervention were significantly higher than pre-intervention scores. Figure 3 exemplifies the significant changes between the reported post-intervention MAAS data in comparison to the pre-intervention MAAS data.

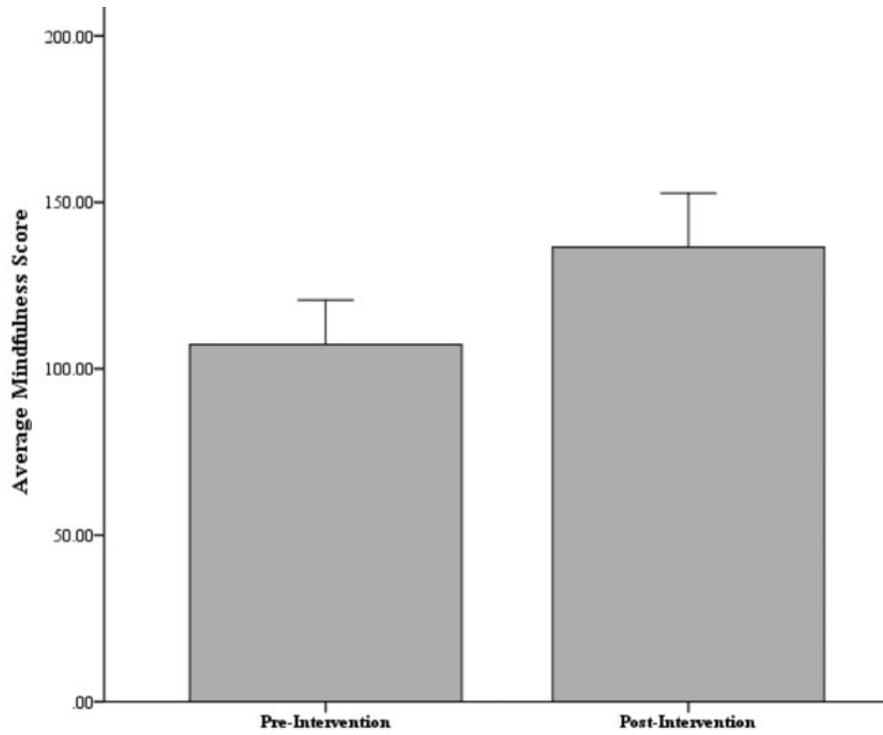


Figure 2. FFMQ Total Mindfulness Score: Pre-intervention to Post-intervention

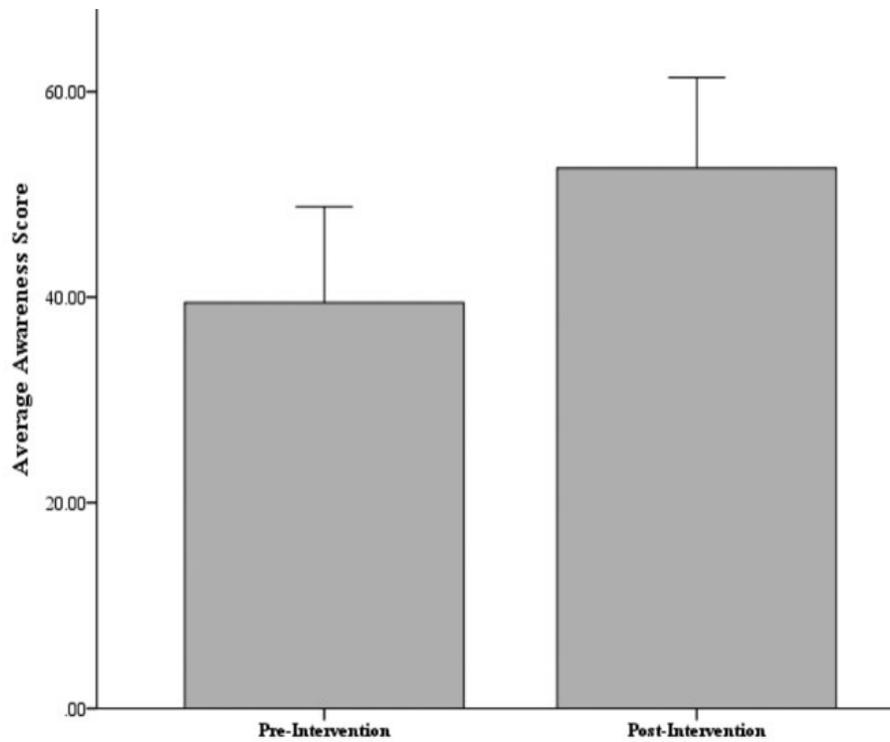


Figure 3. MAAS Mindful Awareness Scale: Pre-intervention to Post-intervention

Burnout

A Wilcoxon ranked sum test was used to assess the data for each subscale, with the exception of Professional Efficacy. For the Professional Efficacy subscale, a paired samples t test was performed. This analysis showed that the Maslach Burnout Inventory-General Survey (MBI-GS) Cynicism subscale demonstrated insignificant differences between the pre- and post-intervention, $Z = -.35, p = .726$. When examining the results of the Professional Efficacy subscale of the MBI-GS, insignificant differences were found between pre- and post-intervention timepoints, $t(10) = -.06, p = .950$. Following the analysis of the Exhaustion subscale of the MBI-GS, the difference between pre- and post-intervention results were insignificant, $Z = -.97, p = .330$.

Stress

Further analysis of the Perceived Stress Scale (PSS) total score using a paired samples t test demonstrated a significant difference between the pre- and post-intervention, $t(10) = 3.66, p = .004$. Results suggest that PSS scores from post-intervention were significantly lower than pre-intervention scores. Figure 4 illustrates the significant changes pre- and post-intervention in the reported PSS scores.

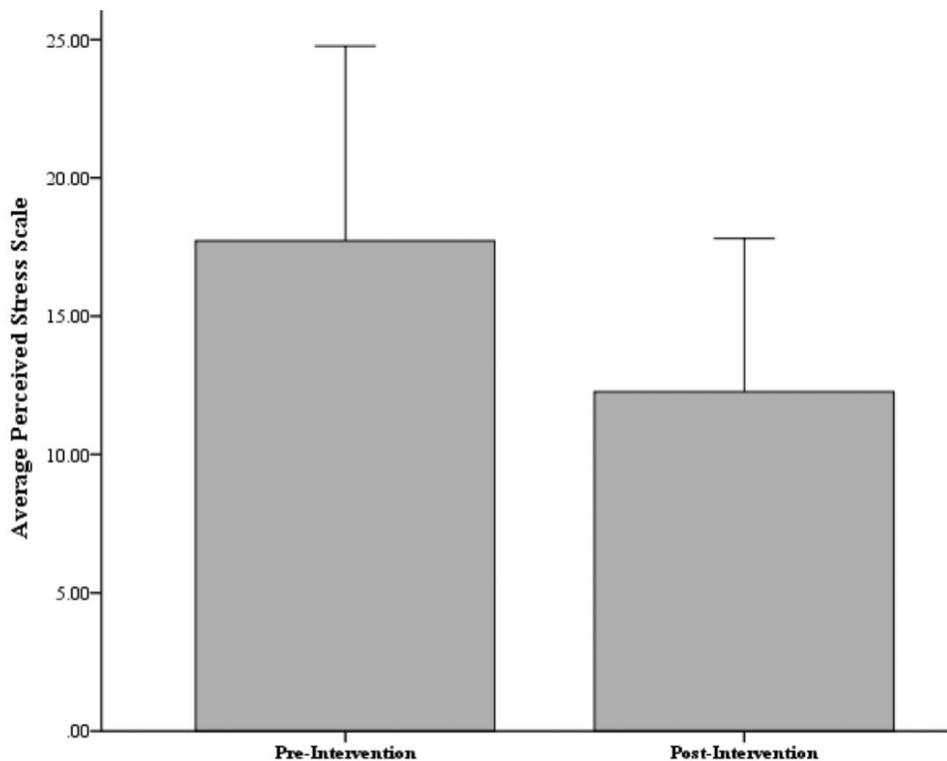


Figure 4. PSS Stress Response: Pre-intervention to Post-intervention

DISCUSSION

This study aimed to investigate the implementation of MBSR in university faculty and staff in relation to experiences of stress and burnout as a way of addressing the persistent reports of negative psychological symptoms commonly found in this population. It was hypothesized that following mindfulness intervention, this population would demonstrate a decrease in negative experiences such as stress, burnout, and psychological distress, and the outcomes in part supported this claim. Results suggest that MBSR may have had a positive impact in this population. In this study, the mindfulness, distress, and perceptions of stress measures were found to have improved significantly from pre-intervention to post-intervention.

This study predicted a decrease in stress and burnout with an increase in mindfulness; while the results indicated decreased levels of perceived stress and higher levels of mindfulness, the subscales that comprise burnout did not significantly decrease. Measures of psychological distress as demonstrated by the BSI-18 Global Severity Index and the Depression subscale significantly decreased from pre- to post-intervention, specifically exemplifying a negative relation between the implementation of MBSR and mental health symptomology. Despite this, experiences of Somatization and Anxiety did not significantly decrease by the end of the study, contrasting with previous studies that have indicated significant change in both measures (Gold et al., 2010; Sibinga et al., 2016). A viable explanation for the fact that not all BSI-18 subscales changed over time could be the fact that this sample's scores on the BSI-18 were not largely in the clinically significant range (only four participants met the clinically significant cut-off at baseline assessment) suggesting a mostly healthy population with limited room for further reduction in these measures of psychopathology (i.e., floor effect). Another explanation may be that MBSR could be specifically more effective for symptoms of depression in this population.

Both the MAAS and the FFMQ displayed significant increases in mindfulness, meaning that participants' ability to be aware of their surroundings without judgement improved from pre-intervention to post-intervention. This aligns with previous studies that indicate a promotion of mindfulness in association with MBSR (Frank et al., 2015). It also validates the experimental manipulation of mindfulness among participants following an intervention (i.e., MBSR) designed to increase mindfulness as a personal dispositional attribute.

Each of the three subscales of the MBI did not statistically significantly change between pre- and post-intervention scores, which signifies that participants' levels of Cynicism, Exhaustion, and Professional Efficacy did not significantly decrease in this study as originally predicted. This contrasts with previous research, which has displayed significant increases in participant Professional Efficacy and decreases in Exhaustion and burnout after undergoing mindfulness training (Cohen-Katz et al., 2005). The PSS scale demonstrated a substantial decrease in stress from pre- to post-intervention, which

highlights the potential for MBSR to have reduced levels of perceived stress in participants. This supports past studies which have suggested that mindfulness training plays a role in reducing feelings of perceived stress (Carmody & Baer, 2008).

Limitations

While this study shed light upon the positive effects of MBSR, it was not without limitations. For one, the small sample size of this study could potentially skew results and prevent generalizability. In addition to this, participant attrition was high at post-intervention data collection. Although participants who completed pre- and post-assessments, relative to those who only completed pre-assessments, did not differ on any pre-intervention scores across all measures, there may have been an unexamined difference between these groups that caused them to not fully participate in the study and may have introduced selection bias into the study's sample. Participant demographics could also be a potential limitation to this study, as participants all identified as White and were mostly women; thus, a lack of sample diversity may limit the ability to generalize these results outside of the experimental setting. The sample was also non-clinical in nature, which could have prevented the detection of changes in workplace burnout. In other words, as participants' distress was (relative to reported clinical cutoff scores) low at the baseline, burnout levels may also have been low and thus there would be little room for scores to decrease further following intervention (i.e., the floor effect).

Furthermore with regards to burnout, the MBI-GS Inventory does not indicate clinical significance, as it assesses burnout along a continuous spectrum rather than as a categorical outcome, and there is no published normative range for this scale. Therefore, there is no way to assess whether scores obtained were indicative of a high burnout group or not. There may be temporal limitations in regard to the measurement of burnout as well; burnout is a negative experience that builds upon itself over time, contrasting with other sub-scales such as stress that present themselves more swiftly and likewise may ameliorate more swiftly. It may have been that participants actually obtained protective burnout-buffering effects as a function of MBSR (e.g., acute reduction in stress), and were it not for their participation in the program that burnout scores would have been higher at post-intervention time point, or that burnout scores may actually reduce in a longer measurement window post-MBSR. However, as this research did not employ a control group condition, this research design limits the ability to draw conclusions regarding the causal relation of MBSR and observed outcomes generally, and in regards to burnout specifically; future research employing a control group could better explore this area. Other contextual factors may also have affected the results and present another limitation to this research. For example, this study was conducted during the university's spring semester (January through May); the geographical region of this university experiences less sunlight than average and a higher degree of unpleasant weather conditions, which could contribute to increases in reported stress, burnout, and feelings of depression which may have affected

the outcomes obtained. Future research should include an active control group or complete trials at different points in the academic year to account for contextual elements that may have influenced participants' stress and burnout.

As previously stated, this specific study did not include minority individuals, a common occurrence in mindfulness-based research, which can impede upon concluding the effectiveness of MBSR among multiple populations. The demographics of this study are mainly reflective of the common participants of mindfulness research: middle-aged affluent White women (Burnett-Zeigler et al., 2016). White individuals do not experience the added stressors of discrimination on the basis of race, and minorities are often plagued by economic disadvantages that could enhance burnout. Participatory gaps, referring to a lack of representation in the research, specifically in mindfulness research prevent underrepresented populations such as those who are LGBTQ+, non-White, low-income, and/or disabled from accessing the potential benefits of interventions, especially among those with intersectional identities (Chin et al., 2019). Minority or underserved individuals whose experiences in society may differ from the experiences of this study's participants may benefit from adaptations in future mindfulness research and interventions in order to address the added stress and burnout that can arise from discrimination, environmental factors, or socioeconomic status. These groups exist in society and therefore deserve equal access to the benefits of mindfulness research. The ability to participate in psychological interventions would allow for the reduction of stress and increase in feelings of wellbeing in underserved populations.

Future Research

Future research could attempt to increase participant outreach in order to obtain a larger and more diverse sample. Studying the implications of MBSR would be more effective with access to a larger set of data, and investigating the burnout among a greater variety of participants would allow researchers to better avoid gendered and racial biases. For example, as women have traditionally taken on more of the burden of organizing childcare, women in academia may face additional and significant pressure due to the need to balance work and family life obligations (Doyle & Hind, 1998). Women's experiences of stress therefore may differ from men's experience, affecting the consistency of intervention results. Thus, there is a call for future research particularly geared towards the unique experiences that women in the workplace encounter.

An incorporation of an active control group could also allow researchers to better understand the mechanical underpinnings of the effects of MBSR in the workplace. Comparing the results between an experimental group and an active control group would help reveal the efficiency of MBSR while taking into account confounding variables that could interfere with accurate results. While those in academia certainly encounter burnout at a level not to be underestimated, there are other professions that are plagued by stress and negative psychological experiences, perhaps to an even higher degree. In the future, it

is worthwhile to expand the usage of MBSR to other professions that may gain positive effects from this intervention.

Conclusion

In summation, the purpose of this study was to examine the effects of MBSR on stress, burnout, and negative psychological experiences in university faculty and staff. While most results aligned with those found in previous studies, such as increased mindfulness and decreased perceived stress, some experiences such as Somatization and Anxiety did not significantly decrease from pre- to post-intervention as expected. It is thus necessary to further research the effects of MBSR in collegiate faculty and staff in order to understand the mechanisms of mindfulness in relation to psychological distress. While positive consequences of mindfulness have been apparent in this population, not all results are consistent across studies, denoting the need for more standardized research as well as larger and more diverse samples. In regard to research in the realm of social sciences, it is important to understand and explore diverse individual experiences from a multicultural perspective in order to study humans with accuracy and compassion. MBSR's potential to yield benefits for collegiate populations demonstrates the call for future research not only in the field of psychology to pinpoint the mechanisms that promote mindfulness and decrease burnout as well as to further understand its effects on various populations, but also in the wider lens of the social sciences that may benefit from adjusting traditionally White-oriented studies for diverse individuals.

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