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Effects of a Mindfulness Intervention to Improve Teachers' Well-Being

Abstract

Teacher attrition has increased by 50% over the past 15 years. The purpose of this study was to determine whether a mindfulness-based intervention would be effective for reducing stress and increasing mindfulness, self-efficacy, job satisfaction, and well-being among teachers at Title I (low-income) schools. The researchers evaluated the effects of a mindfulness intervention created specifically for teachers using a four-way ANOVA (2 x 3 x 2 x 5) with two between subjects' factors, groups and levels, and two within subjects/repeated measures factors, pre-test-posttest and scales. While the study did not show significant effects for mindfulness, stress, self-efficacy, and well-being, teachers in the control group demonstrated significantly lower levels of job satisfaction compared to the experimental group. These results are commensurate with previous studies that suggest with a mindfulness-based intervention, teachers report increased job satisfaction.

Keywords: teachers, mindfulness, stress, job satisfaction, self-efficacy, well-being

Effects of a Mindfulness Intervention to Improve Teachers' Well-Being

There is an estimated 125,000 teacher shortage in the U.S. (Carver-Thomas & Darling-Hammond, 2017) and the current annual costs of teacher turnover exceed eight billion dollars (Garcia & Weiss (2019). Data from the National Center for Education Statistics (NCES, 2020) showed there were only 3.3 million full and part-time public school teachers, a considerable decline from 2015-16 (NCES, 2018). Research suggests high attrition rates among teachers are due to a lack of administrative support (Carver-Thomas & Darling-Hammond, 2017), pressure for standardized testing (Garcia-Arroyo et al., 2019), excessive workloads (Oberle & Schonert-Reichl, 2016), lack of training and experience (Darling-Hammond, 2010), and maladaptive student behavior (Reiser & McCarthy, 2018).

Factors Associated with Teacher Attrition

High attrition rates among teachers have been correlated with high levels of dissatisfaction among teachers and teacher burnout (Iancu et al., 2018). High stress among teachers decreases job satisfaction (Carver-Thomas & Darling-Hammond, 2017), lowers teachers' physical and mental well-being (Huk et al., 2019), lowers academic achievement among students, and reduces teachers' sense of classroom management (Klusman et al., 2016). Teacher burnout and low teacher self-efficacy also lead to less involvement in lesson planning and less positive behavior toward students. Gray and Taie (2015) noted over 18% of teachers leave the profession after the first five years, making this profession one with the highest turnover rates for new teachers. Stress is one of the major factors that causes teachers to leave the profession (Carver-Thomas & Darling-Hammond, 2017).

Stress

Teachers are often pressured into maintaining a positive classroom environment while preserving student engagement (Braun et al., 2019). Feng (2010) noted teachers with one to three years of experience are often given large class sizes and students with disabilities who require individualized education plans and place teachers at a heightened risk for stress. Chronic levels of stress can lead to burnout and can have a negative effect on teachers' health. For example, Steinhardt et al. (2011) found almost 20% of teachers who reported feeling unbearable levels of stress also reported feeling exhausted, which, in turn, negatively affected their classroom performance. Student behaviors that warrant teacher discipline (e.g., distractibility, hyperactivity, disobedience, and hostile aggression) have been linked to feelings of emotional exhaustion among teachers, a feeling known to cause burnout (Tsouloupas et al., 2010).

Low Job Satisfaction and Self-Efficacy

Researchers have noted teachers with high levels of stress also reported low levels of job satisfaction and reduced professional commitment (McCarthy et al., 2016). Findings suggest different risk factors such as personal attributes (e.g., ability to cope with stress), interpersonal relationships (e.g., colleagues, students, and family) and organizational facets (e.g., school and district) can affect teacher stress and related job satisfaction. Research has also shown novice teachers report job-related anxiety, loneliness, and inadequacy (Prilleltinsky et al., 2016). As such, interventions that can reduce stress among teachers, especially new teachers who may be at increased risk for stress, is important for enhancing teacher satisfaction and self-efficacy.

A lack of job satisfaction is also associated with feelings of anxiety and depression (Klassen et al., 2009) and perceptions of self-efficacy have been correlated with job satisfaction across many professions (Malinen & Savolainen, 2016). Pas et al. (2012) described teacher self-efficacy as having the ability to create a safe learning environment and being able to deliver

instructions. Malinen and Savolainen suggested teachers who have high levels of self-efficacy have increased success in methods of dealing with problematic student behavior. As such, interventions designed to enhance self-efficacy can lead to higher job satisfaction and less attrition among teachers.

Mindfulness-based Stress Reduction

Mindfulness-based stress reduction (MBSR) interventions entail three types of formal practices (1) engaging in mindful movement, (2) body scanning, and (3) sitting in meditation (Cullen, 2011). Haydon et al. (2019) described the core components of MBSR interventions as body scans, guided imagery, calm breathing, and nonjudgmental observations. Mindfulness-based interventions, specifically MBSR interventions, have been shown to focus and reduce stress, depression, and anxiety. Additionally, MBSR interventions have been associated with increased levels of job satisfaction (Reiser et al., 2016). MBSR interventions have also demonstrated an increased ability for teachers to manage stressful situations and exert increased control over their responses to student behaviors (Haydon et al., 2019).

Mindfulness-based Interventions for Teachers

Mindfulness-based stress reduction (MBSR) interventions increase brain activity in the amygdala, hippocampus, and prefrontal cortex, all of which are brain areas known to regulate emotions, process decisions, and increase memory (Haydon et al., 2019). A study conducted among 605 teachers that examined teachers' mindfulness traits and quality of occupational life showed teachers' mindfulness was negatively correlated with workload stress appraisal and positively correlated with work satisfaction. Reiser (2017) also reported the *Stress Prevention*

and Mindfulness (SPAM) intervention has high levels of mindfulness which can increase teachers' feelings of universality and group cohesion. Sevinc et al. (2018) noted MBSR interventions affect one's awareness, self-compassion, and salience while being an effective method for reducing stress. According to Guidetti et al. (2019), when individuals feel competent, has necessary resources and tools, and feels reduced stress, they will demonstrate high levels of well-being.

The purpose of the present study was to determine whether an eight-week, stress prevention, mindfulness-based intervention would be effective for reducing stress and increasing mindfulness, self-efficacy, job satisfaction, and well-being among elementary, middle, and high school teachers. The study addressed the following research question: Does a mindfulness intervention reduce stress and increase mindfulness, self-efficacy, job satisfaction, and well-being among elementary, middle, and high school teachers?

Method

Participants

The sample was recruited at one elementary, one middle, and one high school located in a southwestern city in the United States. All three are Title I schools that have high number of low-income students and receive federal funding to help students meet academic standards. Of the 14 participants assigned to the experimental group, the majority of them were Hispanic (64.3%) female (92.9%) with a bachelor's degree (57.1%). High school (42.9%) was the largest group of academic teaching level. In addition, 64.3% of the participants had more than 11 years of teaching experience and 78.6% of them taught a CORE class (i.e., math, science, English and social studies). Nearly four in five (78.6%) of the teachers reported currently feeling stressed at the commencement of the study. Similarly, the 19 participants in the control group were mostly

Hispanic (63.2%) female (63.2%) with a bachelor's degree (78.9%). Elementary school (42.1%) was the largest group of academic teaching level. Furthermore, 57.9% of the participants had more than 16 years of teaching experience and 68.4% of them taught a CORE class.

Approximately two-thirds (63.2.6%) of the teachers reported currently feeling stressed.

Procedure

Official approval to conduct the study was obtained from the university Institutional Review Board. A paper-pencil pre-assessment package was given to both the experimental and control groups in each educational level, and it included one demographic questionnaire and five measures to assess mindfulness, stress, self-efficacy, job satisfaction, and well-being, respectively. Once the experimental group completed their eight-week intervention sessions, both groups were provided with post package surveys. The post package included the same five measures; however, the experimental group received an additional page with three post-intervention reflection questions to assess the application of mindfulness techniques and skills in the teacher's life (e.g., whether they would use mindfulness in the future).

Scales

There were five dependent variable standardized surveys and one demographic survey used in the data collection process for this study (1) a demographic measure, (2) the *Five-Facet Mindfulness Questionnaire* (FFMQ, Baer et al., 2012), (3) the *Perceived Stress Scale* (PSS, Cohen et al., 1983), (4) the *Teacher Self-Efficacy Scale* (TSES, Tschannen-Moran & Hoy, 2001), (5) the *Job Satisfaction Scale* (JSS, Spector, 1997), and (6) the *Warwick-Edinburgh Mental Well-Being Scale* (WEMWBS, Stewart-Brown & Janmohamed, 2008).

The psychometric property of the internal reliability for each of the scales was derived through the utilization of Cronbach's alpha for each scale in the pretest and then again in the post-test. The mean Cronbach's alpha across pretest and posttest was derived by utilizing Zr transformation. For example, stress had a pre Cronbach's alpha of .92, post of .85 and a mean Cronbach's alpha of .89.

SPAM Intervention

The current study used the Reiser and McCarthy (2018) Stress Prevention and Mindfulness (SPAM) intervention developed specifically for teachers (K-12) to learn about mindfulness. The SPAM intervention was adapted from the Optimize Your Potential Program, which is an eight-week mindfulness-based intervention founded on the work on Jon Kabat-Zinn (2015), who developed the mindfulness-based stress reduction. The psychoeducation material and activities in the SPAM intervention was developed to (1) increase teachers' knowledge about causes of stress (2) introduce mindfulness skills and techniques, and (3) increase social support by providing a therapeutic group environment in session.

The SPAM intervention consisted of eight weekly sessions which lasted approximately one hour per session. One principal facilitator and one volunteer assistant ran the sessions. The group facilitated sessions included PowerPoint slides, worksheets for the sessions, group discussions, in-session activities, and mindfulness techniques homework. See Table 1 for detail activities in each session.

<Table 1>

Data Analysis

We used a four-way ANOVA (2 x 3 x 2 x 5) to answer the research question (see Table 2). The four-way factorial ANOVA included two between subjects' factors, groups and levels,

and two within subjects/repeated measures factors, pre-test-posttest and scales. This study consisted of two groups (experimental and control), pre and posttests, five scales (i.e., mindfulness, stress, self-efficacy, job satisfaction, and well-being), and three levels (i.e., elementary, middle, and high school). The hypotheses were tested with an F distribution at the .05 level of significance. Those with significant omnibus F values were further assessed through multiple pairwise comparisons procedures. Bonferroni testing was used for significant results in scales and Scheffé testing for significant results in pre-posttest and scales, and pre-posttest, scales and groups. Bonferroni testing uses a level of significance of .05 and Scheffé testing at a .05 level.

Results

Table 2 shows a four-way factorial ANOVA (2 x 3 x 2 x 5) groups, levels, pretest-posttest and scales: mindfulness, stress, job satisfaction, self-efficacy, and well-being.

<Table 2>

Means and Differences Between Scales

We computed the means for the scales. The means for the scales were the following: mindfulness (M = 37.36), stress (M = 23.69), self-efficacy (M = 39.42), job satisfaction (M = 81.21), and well-being (M = 36.24). A Bonferroni was used to measure significance for differences between scales at a $p \leq .05$ level. There was a difference found between mindfulness and stress at a (M = 13.65), mindfulness and job satisfaction at a (M = -43.86), stress and self-efficacy at a (M = -15.73), stress and job satisfaction at a (M = -57.52), stress and well-being (M = -12.55). There was also difference found between self-efficacy and job satisfaction at a (M = -41.79) and job satisfaction and well-being (M = 44.97). See Table 3 for more detail results of means and differences between scales.

<Table 3>

Means and Differences among Pre-Post Test and Scales

Pre-test means for scales are as follows: mindfulness (M = 35.67), stress (M = 22.72), self-efficacy (M = 39.60), job satisfaction (M = 82.70), and well-being (M = 33.70). Means for post-tests were mindfulness (M = 39.04), stress (M = 24.65), self-efficacy (M = 39.24), job satisfaction (M = 79.73) and well-being (M = 38.52). A Scheffé test was used to measure significant difference of means at a level of $p \leq .05$ for pre-post and scales.

The significant mean differences are presented below and can be found in Table 4. Pre mindfulness had two significant results with post stress (M = 11.02) and post job satisfaction (M = -44.06). Pre-stress had significant level with post mindfulness (M = 16.32), post self-efficacy (M = 16.52), post job satisfaction (M = -57.03) and post well-being (M = -15.8). Pre self-efficacy had significant level with post stress (M = 14.94) and post job satisfaction (M = -40.14). Pre job satisfaction had a significant level with post mindfulness (M = 43.65), post stress (M = 58.04), post self-efficacy (M = 43.45) and post well-being (M = 44.17). Pre well-being had a significant level with post mindfulness (M = -5.35), post stress (M = 9.04), post self-efficacy (M = -5.55), post job satisfaction (M = 46.04) and post well-being (M = -4.83). Pre and post stress had significant results with all of the other scales except with stress. Pre and post job satisfaction also had significant results with all of the other scales except with job satisfaction. Pre well-being on the other hand had significant results with all the other scales and with itself. However, post well-being only had three significant results with stress, job satisfaction and well-being.

<Table 4>

Means and Differences Among Groups, Pre-Post and Scales

Means for the experimental group pre-test are as follows: mindfulness (M = 34.08), stress (M = 21.75), self-efficacy (M = 40.16), job satisfaction (M = 79.58) and well-being (M = 32.44). Post-test means for the experimental group were mindfulness (M = 37.13), stress (M = 23.19), self-efficacy (M = 40.44), job satisfaction (M = 82.38) and well-being (M = 37.97). Means for the control group pre-test are as follows: mindfulness (M = 37.26), stress (M = 23.69), self-efficacy (M = 39.01), job satisfaction (M = 85.80) and well-being (M = 35.49). Post-test means for the control group were mindfulness (M = 40.93), stress (M = 26.11), self-efficacy (M = 38.05), job satisfaction (M = 77.08) and well-being (M = 39.07).

Overall means for the control group tended to be higher than the means for both pre and post experimental group. Additionally, overall means increased from pre to post trials. Four (i.e., mindfulness, stress, job satisfaction, and well-being) of five pre means for the control group were higher than the experimental group pre means. Additionally, job satisfaction was the construct with the biggest difference between pre-experimental mean and pre control mean. There was a noticeable difference of (6.22) between means for pre control and pre-experimental in the job satisfaction construct. However, self-efficacy was the only construct and mean in the experimental group that was higher than the control group with a difference of (1.15).

The post means for the experimental group and means for the control group reflect some changes after the intervention and 8-week period. The control group had a total of three post means that were higher than the experimental group post means. Mindfulness, stress and well-being post means were still higher in the control group than the experimental group. The experimental group still had higher means for self-efficacy but also reflected higher means for the job satisfaction construct.

Table 5 reflects differences in means for each group and in pre-posttests. Means were subtracted from the pretests to the posttest for each group. The values in the experimental group are all negative values meaning the pre means were smaller than the post means. When subtracted from each other, there is a negative difference (see Table 5). This signifies the means from the pre to the post in the experimental group increased. The values in the experimental group were -3.05 for mindfulness, -1.44 for stress, -0.28 for self-efficacy, -2.80 for job satisfaction and -5.53 for well-being. However, none of the values were significant for the experimental group.

The control group had negative values for mindfulness (-3.67), stress (-2.42) and well-being (-3.58), meaning that the control group increased in these constructs just like the experimental group. However, the control group had two values that were positive, meaning there was decline in self-efficacy (0.96) and job satisfaction (8.72). Job satisfaction was the only value from the control group with a significant difference at a .05 level. These results indicate there was a significant decrease in job satisfaction scale for the control group.

<Table 5>

Differences between means in the experimental group and the control group are also presented in Table 5. There is an absolute difference between means for the experimental and control group of (.62) for the mindfulness scale, (.98) for the stress scale, (1.24) for the self-efficacy scale, (11.52) for the job satisfaction scale and (1.95) for the well-being scale. These differences of means between groups do not appear to be of big difference, with the exception of job satisfaction which has a big difference of means between groups. Job satisfaction had a (11.52) mean difference between the experimental and control groups.

It can be concluded that there were higher post results of all scales (e.g., mindfulness, stress, self-efficacy, job satisfaction, and well-being) in the experimental group. However, none of the results were significant. Some constructs in the control group such as mindfulness, stress, and well-being increased while self-efficacy and job satisfaction decreased. Job satisfaction was the only construct which decreased at a significant .05 level.

Pairwise Comparisons

Pre-experimental and pre-control had a total of 25 results and had 14 significant results. The post-experimental and post-control section of the groups also had 25 total results with 14 significant results. However, the results which compared the same scales were not significant for the pre-pre section or the post-post section. The same scales and results which were significant in the pre-pre section were also significant in the post-post section. Means were then subtracted from the pretests to the posttest for each group. Table 6 reflects differences in means for each group and in pre-posttests. Smaller values in in pre that are subtracted from bigger numbers in post will lead to negative values, which mean increased differences between means. For example, the experimental pre mindfulness scale was significant with the pre control group scale of stress (10.39) and job satisfaction (-51.72). The experimental post mindfulness scale was significant with the post control group scale stress (11.02) and job satisfaction (-39.95). It can be concluded from these results that mindfulness and stress, and mindfulness and job satisfaction decreased. See Table 6 for detail results of the pairwise comparisons.

<Table 6>

In summary, there were no significant results in pre-posttests and scales and groups, when using a pairwise comparison analysis. However, based on the study's results, it can be

concluded job satisfaction decreased at a significant level for the control as compared to the experimental group who received the SPAM intervention.

Discussion

The purpose of this study was to explore the impact of an eight-week, mindfulness-based intervention designed to increase mindfulness, self-efficacy, job satisfaction, and well-being and to reduce stress among elementary, middle, and high school teachers at a Title I school located on the U.S.-Mexico border. Overall, the results of the study suggested the use of a Stress Prevention and Mindfulness (SPAM) intervention yielded a significant decrease in job satisfaction among teachers who did not participate in the intervention and a noteworthy but nonsignificant increase in the experimental group. These results are commensurate with previous studies (e.g., Harmsen et al., 2018; Prilleltensky et al., 2016) which demonstrated that with advanced training and professional support, teachers felt increasingly capable of dealing with students' negative behavior, felt competent, and reported high job satisfaction.

Well-being was the closest construct to reach a significant level in the experimental (SPAM intervention) teacher group. Well-being among the experimental SPAM group reflected a substantial (albeit nonsignificant) increase from pre-posttest, suggesting teachers who participated in the SPAM intervention had an increase in their mental well-being. Previous research has suggested mindfulness techniques are great tools for increasing emotional health and life satisfaction (Mansfield et al., 2016). Past research (e.g., Braun et al., 2019; Taylor et al., 2016) also shows interventions focused on increasing levels of teacher mindfulness and/or awareness will result in higher levels of well-being, improved quality of teacher-student interactions, and burnout reduction among teachers.

Self-efficacy scores showed teachers who participated in this study remained in the same non-significant levels for the experimental group at pre-post but decreased with non-significant levels for the control group at post. This means self-efficacy increased among teacher participants who were part of the SPAM intervention and decreased for those who were not part of the eight-week intervention. Similar to other studies regarding self-efficacy among teachers the present study showed mindfulness-based interventions can be an effective method for improving levels of teacher self-efficacy.

Results at posttest for stress demonstrated a non-significant increase stress in levels for both the control and experimental groups. However, the control group means for stress reflected higher levels of stress at pre-posttest as compared to the experimental group means. This suggests although there were no significant results for the stress construct, the group that did not participate in the intervention had higher levels of stress when measured at posttest. Consistent with other studies regarding stress among teachers (e.g., Guidetti et al., 2019; Hwang et al., 2019), this study found the control group had higher levels of stress at posttest when compared to the experimental group where teachers participated in an eight-week mindfulness intervention.

Mindfulness levels at pre-post tests for this study remained constant for both the experimental and control groups. These results are contradictory to previous results which suggest mindfulness interventions will increase mindfulness among participants. However, more than half the teachers in the experimental SPAM intervention group reported they had many other school-related responsibilities outside their regular classroom duties. As such, teachers were required to teach while engaging in numerous extracurricular activities.

Limitations

The generalizability of the findings in this study is curtailed by the majority of teacher participants being Hispanic. Furthermore, teaching at Title I schools in the one of poorest regions in the U.S. may have inadvertently exposed the teachers to high levels of stress. In addition, previous research suggests two hours for eight to 12 weeks is the most effective format for delivering mindfulness-based interventions (Baer et al., 2012). However, our intervention was shortened to one-hour weekly sessions to accommodate teachers' schedules. Because there was a one-week gap at week six of the SPAM intervention due to a schedule conflict of school events, it is plausible that some teachers may have lost momentum for the intervention during that week.

Future Directions

Providing professional development and administrative support have been identified as the biggest factors correlated with keeping teachers in the profession (Tickle et al., 2011). Mindfulness-based interventions also promote teacher well-being (Ruijgrok-Lupton et al., 2018). The present study demonstrated how an eight-week stress and mindfulness intervention can increase job satisfaction. The results are consistent with previous findings that demonstrated mindfulness-based interventions are an effective method for increasing job satisfaction among teachers (e.g., Prilleltinsky et al., 2016).

When using mindfulness-based interventions with teachers, it is recommended the intervention be offered during school hours. Incentives (e.g., continuing education units) are recommended to reward teacher participation. Previous studies also suggest the most important factor when providing a mindfulness-based intervention is for the facilitator to have good teaching methods and teaching experience rather than having a large amount of mindfulness-based intervention training experience (Ruijgrok-Lupton, et al., 2018). Based on this study and previous research, it is recommended the facilitator of the mindfulness intervention engage in a

personal mindfulness practice and has teaching experience and/or counseling background when conducting mindfulness group interventions. Facilitator certification in mindfulness practices is also recommended.

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Table 1

Stress and Prevention and Mindfulness Intervention Sessions

Stress Prevention and Mindfulness Intervention			
Session	Title of Session	Topic Discussed	Homework
Session 1	Introduction to Teacher Stress and Mindfulness	Transactional model of stress, triggers, demands and resources	Attitudinal qualities and mindfulness activities
Session 2	The Stress Response	Stress cycle, body sensations, feelings, and thoughts	Read handouts, 3 exercises and watch video
Session 3	Stress and Thinking	Unhealthy personal thinking patterns	Reading a handout, completing a chart, and completing three mindful breathing exercises
Session 4	Stress and Emotion	Emotions and emotional acceptance	Reading a handout and completing three mindfulness breathing exercises
Session 5	Mindful Communication Part 1	Psychoeducation on communication styles, mindfulness communication and universal human needs	Practice expressing needs and request. Complete 3-5 mindfulness exercises
Session 6	Mindful Communication Part 2	Three-minute breathing activity, unmet needs and negative judgements	Transforming judging exercise and complete 3- 5 alternate nostril breathing
Session 7	Mindfulness for Stress Reduction	Overview, challenges and successes, and mindfulness body scan	Reflection, pleasant moment calendar, handout and 3-5 body scans
Session 8	Group Termination and Resources	Reflect on the knowledge and skills learned	

Table 2

Summary Table for a Four-Way Factorial ANOVA (2 x 3 x 2 x 5) Groups, Levels, Pretest-Posttest and Scales: Mindfulness, Stress, Job Satisfaction, Self-Efficacy and Well-Being

Source of Variation	<i>SS</i>	<i>df usual</i>	<i>df conservative</i>	<i>MS</i>	<i>F</i>	<i>Partial η^2</i>
Between Subjects	9,728.10	32				
Groups	135.92	1		135.92	0.43	
Levels	233.65	2		116.82	0.36	
Groups x Levels	740.62	2		370.31	1.16	
error b	8,617.91	27		319.18		
Within Subjects	138,137.32	297				
Between Pre-Post	130.49	1		130.49	1.81	
Pre-Post x Groups	130.73	1		130.73	1.81	
Pre-Post x Levels	160.67	2		80.34	1.11	
Pre-Post x Groups x Levels	269.33	2		148.16	2.05	
error W1	1,949.43	27		72.18		
Between Scales	118,623.72	4	1	29,205.93	310.90	.92
Scales x Groups	255.21	4		63.8	0.68	
Scales x Levels	399.26	8		49.9	0.53	
Scales x Groups x Levels	1,289.20	8		161.151	1.71	
error W2	10,145.44	108	27	93.94		
Between Pre-Post x Scales	547.67	4	1	136.92	4.25	.14
Pre-Post x Scales x Groups	398.82	4	1	99.70	3.09	.10
Pre-Post x Scales x Levels	178.39	8		22.30	0.69	
Pre-Post x Scales x Groups x Levels	150.82	8		18.85	0.58	
error W3	3,481.13	108	27	32.23		
Total	147,865.32	329				

Note. The lower bound *df* were used because sphericity could not be assumed.

Table 3

Means Difference Between Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction, and Well-Being

Scales	1	2	3	4	5
1. Mindfulness	–				
2. Stress	-13.67**	–			
3. Self-Efficacy	2.06	15.73**	–		
4. Job Satisfaction	43.85**	57.52**	41.79**	–	
5. Well-Being	-1.12	12.55**	-3.18	-44.97**	–

Note. 1 = Mindfulness, 2 = Stress, 3 = Self-Efficacy, 4 = Job Satisfaction, 5 = Well-Being

* $p < .05$. ** $p < .01$.

Table 4

Differences Between Means for Pre-Post and Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction, and Well-Being

Scales	Post				
	Pre	1	2	3	4
1. Mindfulness	-3.37	11.02**	-3.57	-44.06**	-2.85
2. Stress	16.32**	-1.93	-1.93	-57.03**	-15.8**
3. Self-Efficacy	.55	14.94**	.35	-40.14**	1.07
4. Job Satisfaction	43.65**	58.04**	43.45**	2.96	44.17**
5. Well-Being	-5.35**	9.04**	-5.55**	46.04**	-4.83**

Note. 1 = Mindfulness, 2 = Stress, 3 = Self-Efficacy, 4 = Job Satisfaction, 5 = Well-Being
 * $p < .05$. ** $p < .01$.

Table 5

Differences Means Between Pre-Post in Scales for Control and Experimental Groups

Scales	Experimental Mean	Control Mean	Exp. and Con. Difference
Mindfulness	-3.05	-3.67	.62
Stress	-1.44	-2.42	.98
Self-Efficacy	-0.28	0.96	1.24
Job Satisfaction	-2.80	8.72**	11.52
Well-Being	-5.53	-3.58	1.95

Note. *Scheffé Test*, * $p < .05$. ** $p < .01$.

Table 6

Pairwise Comparisons Between means for Pre-Post, Scales and Groups

Scales		Control										
		Pre					Post					
		Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-Being	Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-Being	
Experimental	Pre	Mindfulness	-3.18	10.39*	-4.93	-51.72*	-1.41	-6.85*	7.97*	3.97	-4.30	-4.99
		Stress	-15.51*	-1.94	-17.26*	-64.05*	-13.74*	-19.18*	-4.36	-16.30*	-55.33*	-17.32
		Self-Efficacy	2.9	16.47*	1.15	-45.64*	4.67	-0.77	14.05*	2.11	36.92*	1.09
		Job Satisfaction	42.32*	55.89*	40.57*	-6.22	44.09*	38.65*	53.47*	41.53*	2.50	40.51*
		Well-Being	-4.82*	8.75	-6.57	-53.36*	-3.05	-8.49*	6.33	-5.61	-44.64*	-6.63
	Post	Mindfulness	-0.13	13.44*	-1.88	-48.67*	1.64	-3.80	11.02*	-0.92	-39.95*	-1.94
		Stress	-14.07*	-0.50	-15.82*	-62.61	-12.30*	-17.74*	-2.92	-14.86*	-53.89*	-15.88*
		Self-Efficacy	3.18	16.75*	1.43	-45.36	4.95	-0.49	14.33	2.39	-36.64	1.37
		Job Satisfaction	45.12*	58.69*	43.37*	-3.42	46.89*	41.45*	56.27*	44.33*	5.30	43.31*
		Well-Being	0.71	14.28*	-1.04	-47.83	2.48	-2.96	11.86*	-0.08	-39.11*	-1.10

*Note. Scheffe Test, * $p < .05$. ** $p < .01$.*