Philippine Christian University
1648 Taft Avenue cor. Pedro Gil St., Malate, Manila
Multidisciplinary Research Journal Dasmariñas Campus
E-ISSN: 3116-398X | P-ISSN: 3116-3971

Effect of Mindful Meditation Technique on the Level of Perceived Stress Among Employees of a Private School in the City of Dasmariñas

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Abstract

Global mental health is a growing crisis, with significant disparities in care and cultural influences impacting access. While studies indicate a substantial prevalence of mental health disorders worldwide (792 million people in 2017) and in the Philippines (3.6 million Filipinos), the focus remains on the general population. Research demonstrates the benefits of mindfulness meditation for stress reduction, emotional regulation, and physiological health, as evidenced by changes in brain activity and improved psychological well-being. However, a critical gap exists in the literature regarding the specific application of mindfulness meditation as a self-care strategy for working professionals. While clinical studies explore mindfulness, there is a lack of targeted research examining its effectiveness in mitigating workplace stressors and promoting mental well-being among employees. This gap highlights the need for studies that directly investigate how mindfulness interventions, like meditation, can be tailored to enhance employee self-care and improve workplace mental health.

Keywords*: Mindful meditation technique, perceived stress, mental health disorders, workplace stressors.*

Introduction

Mental health challenges affect millions globally, with limited access to care compounded by cultural and infrastructural barriers. In the Philippines, an estimated 3.6 million individuals experience mental health disorders. Workplace stressors further affect employee well-being, making self-care practices such as mindful meditation crucial. While research supports the benefits of mindful meditation for stress reduction and emotional regulation, its application in Workplace settings remain underexplored, highlighting the need for interventions that promote employee mental well-being.

The study aimed to determine the effect of mindful meditation on the perceived stress levels among non-teaching employees in a private school in the city of Dasmarinas, Cavite. With increasing concerns about workplace stress, mindfulness interventions have emerged as effective strategies for improving mental well-being.

Statement of the Problem

Specifically, this study sought answers to the following questions:

1. What is the level of stress of the employees based on the pre-test before the mindful meditation intervention?

2. What is the level of stress of the employees based on the post-test after the mindful meditation intervention?

3. Is there a significant difference between the pre-test and the post-test?

Hypotheses

There is no significant difference between the pretest and post-test scores of the perceived stress level of the employees

Methods

This study examined the impact of a four-week mindful meditation intervention on the stress levels of 40 non-teaching staff (42.55% of the total population) in a private school in the city of Dasmariñas, representing various campus departments.

Participants

The respondents consisted of 10 males and 14 females. There were 67 % young adults (ages ranged from 20-40 years old) and 33 % were older adults (41 – 56 years). The researcher engaged forty (n=40) respondents for the current study, sixteen (n=16) were not able to finish the session and twenty-four (24) completed the mindful meditation practice. None of the participants had ever tried mindfulness or other forms of meditation before. They were assigned to one single group.

The researcher used 2 standardized questionnaires to measure the level of stress of the non-teaching staff. The Stress Questionnaire and Perceived Stress Scale. The initial phase of data collection commenced on June 1, 2022, following the approval of a formal letter from the Administrative Officer. A stress questionnaire, accompanied by a consent form, was administered to non-teaching staff. This survey utilized a hybrid approach, being distributed via Google Forms for those working remotely and in hard copy for personnel working outside their offices.

Subsequently, a pre-test using the Perceived Stress Scale-10 (PSS-10) questionnaire was administered on June 3, 2022. This was distributed through messenger as both a Google Form and a hard copy on June 4-5, 2022.

A second letter, dated June 6, 2022, was submitted to the Administrative Officer to request the excusal of respondents for participation in the mindful meditation practice. The post-test was administered following the conclusion of the meditation sessions.

A quasi-experimental pre-test and post-test single-group design was employed to measure the impact of mindfulness, which was assessed using the Perceived Stress Scale (PSS-10) before and after the intervention. Statistical analyses were used to interpret the data, including percentage, weighted mean, standard deviation, and paired t-test.

Limitations

A significant limitation of this study was the modality of intervention delivery. Due to specific protocols, only one face-to-face meeting was conducted, with all subsequent sessions taking place virtually.

Despite the virtual nature of most sessions, the outcomes observed are consistent with findings from similar interventions. Notably, the facilitator reported that online classes, conducted for 2.5 hours per week over eight weeks, resulted in a 40% reduction in depression, a 33% reduction in anxiety, a

27% reduction in stress, and a 10% increase on the well-being scale.

Data Gathering Procedure

Research Protocol

This study utilized a mindful meditation technique as an intervention for non-teaching employees in a private school in Dasmarinas, Cavite. The objective of this mindful intervention was to cultivate a state of attentive, focused relaxation by observing thoughts and sensations without judgment, thereby guiding the mind back to the present moment. Each mindful technique employed in this study is a form of meditation.

Recruitment Phase: First Approach

The recruitment process for participants involved several systematic steps:

***Initial Outreach*:** The researcher conducted face-to-face visits to each office to inform non-teaching personnel about the upcoming study on mindfulness meditation techniques. The objectives and goals of the study were thoroughly explained to potential participants.

Administrative Approval: Following the initial explanation, the researcher submitted a formal letter to the administrative office, requesting permission to conduct an initial survey among all tenured non-teaching personnel. This survey was administered via Google Forms and paper copies to accommodate all participants.***Eligibility Screening*:** A 25-item Stress Questionnaire was employed as an eligibility screening tool. Participants provided consent by signing the attached consent form.

Participant Selection: A total of 94 non-teaching staff members completed the stress questionnaire, either through Google Forms or via distributed paper copies in their respective offices. Participants who scored 5 points or higher on the questionnaire, indicating a higher likelihood of experiencing stress-related ill health (mental, physical, or both), were deemed eligible for inclusion in the study due to their increased susceptibility to stress.

Result Disclosure and Qualification Notification

The researcher promptly reviewed the stress questionnaires, explained the results (minimal, moderate, or severe stress levels) to the participants, and subsequently notified q ualified individuals of their eligibility via SMS or in-person communication.

Administrative Clearance for Participation

A list of qualified respondents, accompanied by a formal letter, was submitted to the administrative office. This letter requested permission for the selected participants to be excused from work for 20 minutes to attend the mindful meditation practice sessions.

Confidentiality Assurance

Recruited participants were informed via email or SMS messaging that all information obtained in connection with the study that could identify them would be kept confidential and disclosed only with their explicit permission. This measure was implemented in compliance with the University's Data Privacy Policy and adhered to the requirements of RA 10173, also known as the Data Privacy Act of 2012.

The intervention sessions were conducted in the Elementary Audio-Visual Room, located on the second level of the campus. The venue was equipped with two air conditioners, an

additional electric fan, a large-screen television for facilitator's laptop connectivity, and a sound system, with a seating capacity of 50 persons. The sessions were structured as follows, commencing on June 6, 2022:

Session 1 (Face-to-Face):

Registration and Vital Signs:

From 8:30 AM to 9:00 AM, all qualified respondents proceeded to the venue for registration and vital signs assessment, conducted by three registered nurses. Participants were directed to their designated seats while awaiting the arrival of others. The pre-test was sent through a dedicated group chat created by the researcher two days prior to the intervention.

Identification and Scheduling:

Participants were issued identification cards

displaying their intervention schedule on the reverse side. These IDs were signed by the researcher after each session, collected thereafter, and securely stored in a safety box.

Assigned Seating and Restricted Interaction: Designated seating was assigned to participants, and interaction among participants was not permitted during the ongoing intervention.

Sessions 2 to 7 (Virtual):

Hybrid Participation:

All participants convened in the Elementary AVR to practice mindful meditation while the facilitator conducted the session online via Zoom.

Following each session, the facilitator and participants engaged in discussions regarding their experiences, and questions were addressed.

Pre-Session Protocol:

Upon arrival at the venue for these sessions, participants registered, had their vital signs taken, and were required to wear their identification cards.

Meditation Practice:

The facilitator led a 15-minute practice session combining sitting and stretching exercises.

Post-Session Debriefing:

A short discussion ensued after each session, during which the facilitator inquired about the participants' experiences and responded to their questions.

Feedback Sharing:

The final session was dedicated to participants sharing their feedback on the intervention.

Recognition and Appreciation:

Participants received recognition for their involvement in the study, along with the distribution of certificates and small tokens of appreciation for both the participants and the research team.

Additional Reminders and Protocols for the Participants:

To ensure optimal participation and data integrity, the following guidelines and protocols were communicated to all respondents:

Attire: Participants were advised to wear comfortable clothing to facilitate ease of movement and relaxation during the mindful meditation sessions. This was intended to minimize any physical discomfort that might distract from the intervention.

Mobile Device Policy: To minimize distractions and maintain a focused environment, participants were required to turn off their mobile phones and place them in a designated, secure box for the duration of each session. This measure ensured an undisturbed setting conducive to mindful practice.

Refreshments: Snacks were provided to all participants after each session, serving as a brief break and a gesture of appreciation for their attendance and participation.

Data Management and Control of Extraneous Variables

Upon the completion of both the pre-test and post-test phases, all collected data were meticulously retrieved and organized in an Excel format. This organized dataset was then submitted to a qualified statistician for comprehensive analysis.

To enhance the internal validity of the study and control for potential extraneous variables, stringent measures were implemented to ensure consistency across all participant experiences:

Standardized Environment: All participants were provided with the same venue for their sessions, ensuring a consistent physical environment throughout the intervention period.

Uniform Instructions: Identical instructions were delivered to all participants, ensuring that everyone received the same information regarding the procedures and expectations of the study.

Consistent Schedule: Sessions were conducted on the exact dates and at the same times for all participants. This standardization aimed to minimize variations in participant states or external influences that could arise from differing schedules.

Attendance and Punctuality Requirements:

Strict adherence to attendance and punctuality was mandated for all participants. Any participant who was unable to attend even a single session was removed from the study. This strict policy, requiring 100% attendance and no tardiness, was crucial for ensuring that all participants received the full intervention dose, thereby maintaining the integrity and comparability of the data.

Data Analysis

The researcher compared the means using t test. It was designed to see if mindful meditation has any effect on the level of stress of the employees. The type of t-test the researcher was the paired two sample t- test because it compares two means of measurement the Pre-test and the post-test that was taken by the non-teaching staff. On the other hand, the t-test was used to test whether there is a difference between the pre-test and the post-test.

Results:

Table 1 *Frequency and Percentage Distribution of the Level of Stress of the Employees before Mindful Meditation.*

Level of Stress	Frequency	Mean (x)	Percentage (%)
High Stress (27-40)	2	21.46	8.33
	22		91.67
Moderate Stress (14-26)	0		0
Low Stress			
TOTAL	N=24		100

Table II *Frequency and Percentage Distribution of the Level of Stress of the Employees after Mindful Mediation.*

Level of Stress	Frequency	Mean (x)	Percentage
High Stress (27-40)		12.38	0
Moderate Stress (14-26)			37.50
Low Stress			62.50
TOTAL	N- 24		100

Discussion

Prior to the intervention, respondents completed the Perceived Stress Scale-10 (PSS-10) as a pre-test to establish baseline levels of perceived stress. This initial assessment provided a reference point to evaluate changes in stress levels following the intervention and allowed the researcher to determine the effectiveness of the training by comparing pre- and post-intervention scores.

Pre- test scores showed that 91.67% of participants had moderate stress levels, while 8.33% experienced high stress.

Post-test results demonstrated a shift, with 62.5% reporting low stress and 37.5% maintaining moderate stress levels. The mean stress level decreased from 21.46 to 12.38, confirming the effectiveness of the intervention $t(23) = 11.19$, $p < 0.05$). Participants also reported improved emotional regulation and increased awareness of their thoughts and behaviors. The results indicated a significant reduction in stress levels following the mindful meditation intervention. The findings suggest that mindful meditation is a cost-effective, well-tolerated intervention that can be integrated into workplace wellness programs to reduce stress and improve job performance. It is recommended that administrators consider incorporating mindful training for staff, particularly for those in high-stress roles such as nurses, guidance counselors, and administrative personnel. Further research with a larger sample size and longer intervention periods is

recommended to validate these findings and explore the long-term effects of mindful practices in the workplace.

Discussion

This study examined the impact of a four-week mindful meditation intervention on stress levels among 24 employees. Pre-intervention, 91.67% of participants reported moderate stress (mean 21.46), with contributors including sleep issues, financial strain, and workload. The intervention consisted of guided meditation sessions, including stretching and deep breathing, conducted both in person and virtually.

Post-intervention, 62.50% reported low stress (mean 12.38), indicating a significant decrease. A paired t-test confirmed this reduction $t(23) = 11.19$, $p < 0.05$), with a moderate positive correlation between pre- and post-test scores. Participants reported diverse experiences with the intervention, including initial nervousness followed by feelings of calm. The study concludes that mindful meditation effectively reduced stress levels, with participants reporting both positive and negative emotional experiences.

The mindful meditation practice was facilitated by the researcher in collaboration with a qualified and trained mindfulness instructor from The Centre for Mindfulness Studies in Toronto, Canada, and the Mindfulness Program Coordinator/Facilitator at Friendly Care Foundation.

Mindful Meditation Technique

The core of the intervention involved mindfulness meditation, typically performed in a stable, upright sitting position that could be maintained comfortably throughout the session. Each session, lasting twenty (20) minutes, was conducted twice (2) a week for four weeks and structured as follows:

Initial Exercises: Sessions commenced with stretching exercises, during which participants were guided to be mindful of their bodily movements and flow.

Deep Breathing Practice: After stretching, participants engaged in deep-breathing exercises. They were instructed to focus on the physical sensations of breathing, whether it was the rise and fall of their chest, the expansion and deflation of their abdomen, or the passage of cool air through the nostrils during inhalation and warm air during exhalation.

Guided Focus: Participants had the option to close their eyes and rest their hands on their thighs or folded in their lap, with their chin aligned with the navel. They were encouraged to attend to sensations both within their bodies and on their skin. When attention drifted to thoughts or other sensations, participants were reminded that This was normal, and their task was to acknowledge it and gently redirect their focus back to the physical sensations of breathing—specifically, the full length of each inhalation and exhalation. Environmental sounds, extraneous thoughts, and other sensations were to be kept in the background, maintaining the primary focus on the physical act of breathing. This process of gently bringing attention back to the breath was emphasized as an ongoing practice.

Home Practice: Participants were advised to continue practicing mindfulness meditation at home or at work using voice recordings provided by the facilitator, which were forwarded to their respective Messenger accounts. This recommendation is supported

by studies such as Huberty (2019), which

	Pre-test	Post test
Mean	21.4583	12.375
Variance	15.6504	10.5054
Observations	24	24
Pearson Correlation	0.40308	
Hypothesized Mean Difference	0	
df	23	
T stat	11.1887	
P(T<=t)one-tail	4.4E-11	
t Critical one tail	1.71387	
P(T<=t)two-tail	8.8E-11	
C Critical two tailed	2.06866	
*0.05 Significance level		

	n	mean	Standard Deviation (SD)	Two-tailed (df=23, α = 0.05) t-value	CV	p-value
Pre - test	24	21.46	3.96	11. 19	2.07	0
Post - test	24	12.38	3.24			

reported substantial and sustained stress reduction in students who meditated for ten minutes daily for forty days using a mindfulness application.

On-site Support: For employees who did not engage in mindfulness meditation between sessions, the researcher conducted mindful meditation exercises at their workplaces, utilizing the provided voice recordings.

Table III *Pre and Post PSS*

t-Test: Paired Two Sample for Mean

Discussion

The mindful meditation intervention significantly reduced participants' stress levels. Before the intervention, the average stress score was 21.46 (SD = 3.96), which dropped to 12.38 (SD = 3.24) after the meditation. This decrease was statistically significant ($t(23)=11.19$, $p<0.05$), leading to the rejection of the null hypothesis and confirming the intervention's effectiveness in lowering stress. Additionally, a strong positive correlation ($r=0.403$, $N=24$, $p<0.01$) was observed between pre- and post-test scores.

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