

Mindfulness and Its Relationship to Occupational Stress among Special Education Specialists in Day Care Centers for Individuals with Disabilities

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Abstract

The present study examined the levels of mindfulness and occupational stress (OS) among special education specialists (SES) working in day care centers (DCCs) for individuals with disabilities (IWD) in Saudi Arabia. Based on theoretical perspectives that view mindfulness as a psychological buffer against work-related stress, the study also explored the relationship between mindfulness and OS and looked at differences based on gender, years of experience, educational background, and severity of disability among IWD. A descriptive correlational design was used with a sample of 190 SES representing various disability categories. Data were collected using the Mindfulness Scale (MS) and the Occupational Stress Scale (OSS), both of which showed high reliability. Results showed that levels of mindfulness and OS were generally moderate. A significant negative relationship was found between mindfulness and OS ($r = -.33, p < .01$), meaning that greater mindfulness was linked to lower stress. Significant gender differences were found in both mindfulness and OS, with females scoring higher in mindfulness and experiencing less stress. Additionally, years of experience and educational level were significantly related to mindfulness, with more experienced and postgraduate participants demonstrating greater mindfulness. However, no significant differences in OS were found based on experience, education, or severity of disability. These results highlight the important role of mindfulness in reducing OS among SES in Saudi DCCs. It is recommended that mindfulness-based interventions (MBIs) be integrated into professional development programs and that supportive institutional policies be implemented to improve the well-being of specialists and the quality of services provided to IWD.

Keywords: Mindfulness; Occupational Stress; Special Education Specialists; Day Care Centers; Individuals with Disabilities.

اليقظة الذهنية وعلاقتها بالضغوط المهنية لدى أخصائي التربية الخاصة في مراكز الرعاية النهارية للأشخاص ذوي الإعاقة

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الملخص

هدفت الدراسة الحالية إلى التعرف على مستويات اليقظة الذهنية والضغوط المهنية لدى أخصائي التربية الخاصة العاملين في مراكز الرعاية النهارية للأشخاص ذوي الإعاقة في المملكة العربية السعودية. واستنادًا إلى المنظورات النظرية التي تنظر إلى اليقظة الذهنية بوصفها عاملًا نفسيًا واقياً من الضغوط المرتبطة بالعمل، سعت الدراسة كذلك إلى استكشاف العلاقة بين اليقظة الذهنية والضغوط المهنية، والكشف عن الفروق فيما تبعًا لمتغيرات الجنس، وسنوات الخبرة، والمستوى التعليمي، وشدة الإعاقة لدى الأشخاص ذوي الإعاقة. استخدمت الدراسة المنهج الوصفي الارتباطي، واشتملت العينة على 190 أخصائيًا في التربية الخاصة يمثلون فئات مختلفة من الإعاقة. وُجمعت البيانات باستخدام مقياس اليقظة الذهنية ومقياس الضغوط المهنية، وقد أظهر كلا المقياسين مستويات مرتفعة من الثبات. وأظهرت النتائج أن مستويات كل من اليقظة الذهنية والضغوط المهنية كانت متوسطة بوجه عام. كما وُجدت علاقة ارتباطية سالبة دالة إحصائيًا بين اليقظة الذهنية والضغوط المهنية ($r = -0.33$, $p < 0.01$)، بما يشير إلى أن ارتفاع مستوى اليقظة الذهنية يرتبط بانخفاض مستوى الضغوط المهنية. وكشفت النتائج أيضًا عن وجود فروق دالة إحصائية تبعًا للجنس في كل من اليقظة الذهنية والضغوط المهنية؛ إذ سجلت الإناث مستويات أعلى من اليقظة الذهنية ومستويات أقل من الضغوط المهنية. كذلك ارتبطت سنوات الخبرة والمستوى التعليمي ارتباطًا دالًا باليقظة الذهنية، حيث أظهر المشاركون الأكثر خبرة والحاصلون على مؤهلات دراسات عليا مستويات أعلى من اليقظة الذهنية. في المقابل، لم تظهر فروق دالة إحصائية في الضغوط المهنية تبعًا لسنوات الخبرة أو المستوى التعليمي أو شدة الإعاقة. وتبرز هذه النتائج الدور المهم لليقظة الذهنية في خفض الضغوط المهنية لدى أخصائي التربية الخاصة في مراكز الرعاية النهارية بالمملكة العربية السعودية. وتوصي الدراسة بدمج التدخلات القائمة على اليقظة الذهنية ضمن برامج التطوير المهني، إلى جانب تبني سياسات مؤسسية داعمة تسهم في تعزيز الرفاه النفسي للأخصائيين وتحسين جودة الخدمات المقدمة للأشخاص ذوي الإعاقة.

الكلمات المفتاحية: اليقظة الذهنية؛ الضغوط المهنية؛ أخصائيو التربية الخاصة؛ مراكز الرعاية النهارية؛ الأشخاص ذوو الإعاقة.

Introduction

Mental health and human resources are critical components of a long-term, effective educational work environment. Specialists encounter professional demands that might significantly affect their mental health and performance (Alencar et al., 2024). Human resource management plays an important role in moving the focus from a simple benefit to a strategic need inside educational institutions (Papademetriou et al., 2024). Human resource management develops an inclusive work environment that recognizes experts' psychological needs and celebrates their uniqueness by using a human-centered approach (Asdlori, 2023). A healthy workplace decreases psychosocial hazards, hence improving experts' quality of life and professional performance (Barros et al., 2025). Recent findings emphasize the critical need to support mental health in educational institutions as the prevalence of psychological disorders among professionals rises (Xavier et al., 2025). Integrating mental health practices with human resource management is now required to ensure the educational process's continuity and efficiency.

Special education professionals (SES) confront several obstacles, including high turnover owing to poor working conditions, long hours, and low pay (Kiliç & Tepeli, 2025; Yavuz & Kahraman, 2022). Furthermore, a scarcity of professional development opportunities necessitates ongoing training programs to improve competencies and practical abilities (Kiliç & Tepeli, 2025). Furthermore, the social context within these facilities has a direct impact on inclusion for individuals with disabilities (IWD). Supportive environments, inclusive curriculum, and collaborative teaching approaches can all improve educational results and promote successful inclusion (Turlubekova et al., 2023). Professional demands, on the other hand, can encourage creativity and resilience, resulting in more dynamic and successful special education methods.

Literature Review

Mindfulness among Special Education Teachers (SES)

Mindfulness is the nonjudgmental awareness of oneself, including thoughts and feelings, which allows people to focus on their internal experiences in the present moment without judgment

or response. Beyond being a general attentional attitude, mindfulness has been conceptualized as a basic psychological process that alters how people engage with their internal experiences, particularly during stressful and emotional times. This form of awareness has gained a great deal of attention in psychological literature as a critical mechanism for emotional regulation and stress management. It is commonly utilized in therapy programs such as Mindfulness-Based Stress Reduction (MBSR) and Dialectical Behavior Therapy (DBT) to treat mental health concerns such as anxiety and depression (Borah, 2025; Schutte & Malouff, 2025; Vásquez-Dextré, 2016).

According to research, SES with high mindfulness levels often exhibit moderate to high levels of mindfulness, which is associated with work satisfaction, psychological resilience, and spiritual intelligence. These findings emphasize mindfulness as a psychological resource for improving professional performance and emotional well-being (e.g., Al-Kharaan, 2023; Al-Rawashdeh, 2023; Al-Ruwaili, 2024; Metwally, 2021; Mohamed et al., 2025; Najmi, 2021; Nemer, 2021). Furthermore, mindfulness predicts self-efficacy and subjective well-being while decreasing occupational stress (OS), making it useful in tough educational settings. According to research, mindfulness meditation enhances individual happiness, psychological resilience, and emotional regulation in the brain, resulting in better cognitive function and general mental health (Borah, 2025; Hermawan et al., 2024). According to studies, SES has moderate to high levels of mindfulness, which correlates positively with work satisfaction, psychological resilience, and emotional well-being. However, most research has used generic measures of mindfulness that are inappropriate for day care center (DCC) contexts, and few studies have examined SES in childcare settings.

Occupational Stress among SES.

OS is a major concern for SES in India, with stress levels ranging from 5% to 75% (Habeeb et al., 2024). These professionals, particularly those working with IWD, face more stress and burnout than those with hearing or vision impairments (Kaur, 2015). Workload, school structure, interpersonal interactions, employment uncertainty, poor remuneration, and high specialist-to-student ratios are all common stressors. To deal with these problems, experts frequently rely on

social support and task-oriented coping mechanisms (Mathew, 2005). Recent research emphasizes the importance of tailored interventions and institutional support systems in improving the quality of life for SES and student results (Habeeb et al., 2024). Importantly, emerging research shows that OS in such circumstances is impacted not only by client attributes but also by workplace organizational and administrative features (Habeeb et al., 2024; Kurnia, 2015).

In addition to these findings, several studies have found that SES frequently experience high levels of OS as a result of their complicated jobs and emotional demands. Factors including workload, school atmosphere, administrative demands, interpersonal problems, and a lack of professional assistance all contribute to stress. These demands have a detrimental influence on specialists' mental health, work satisfaction, and performance quality. Studies have also found a negative relationship between OS and psychological resilience, implying that high stress levels reduce professionals' coping capacity and drive. As a result, it is critical to conduct treatments and counseling programs to improve coping skills and foster supportive work settings for SES (e.g., Ali, 2021; Al-Khalidi, 2023; Aoun & Kabir, 2016; El-Sayed et al., 2018; Ismail et al., 2021; Mohamed, 2018; Wang et al., 2022). SES routinely report moderate to high OS, citing workload, organizational issues, and emotional demands as the key causes. However, most research focused on classroom settings rather than DCCs, and just a handful investigated stress levels in Saudi DCCs explicitly.

The Relationship Between Mindfulness and OS

Research indicates a substantial correlation between mindfulness and OS, particularly in high-pressure professional contexts. Mindfulness-Based Interventions (MBIs) have demonstrated substantial efficacy in lowering stress and increasing work satisfaction. Ataç and Avcı (2024) found that mindfulness-based stress reduction training decreased stress and increased work satisfaction among nurses. Other research has demonstrated that even brief, self-directed mindfulness activities are useful (Bolm et al., 2022). Furthermore, mindfulness activities have been associated with increased emotional well-being and decreased burnout (Janssen et al., 2018). Healthcare professionals see mindfulness as a beneficial strategy for lowering stress and weariness,

highlighting its simplicity of application and ability to overcome institutional hurdles to practice (Sos & Melton, 2025). A similar negative relationship between mindfulness and OS appears across a variety of professional situations. However, most research concentrated on healthcare personnel or general educators, paying little attention to SES in DCCs, particularly in Arab and Saudi contexts.

Several Arab studies have examined mindfulness among SES. Al-Kharaan (2023) showed moderate mindfulness levels among the SES in Makkah. Metwally (2021) found that mindfulness was positively associated with job satisfaction while remaining modest overall. Al-Ruwaili (2024) revealed that mindfulness predicts occupational well-being within SES. Al-Khalidi (2023) found moderate OS levels among SES in Makkah. Ismail et al. (2021) revealed that occupational stress has a detrimental impact on psychological resilience. Aoun and Kabir (2016) found that common stresses among Algerian SES were workload, inadequate resources, and interpersonal difficulties. While some Arab research has investigated mindfulness or OS separately, none have integrated the two dimensions in a single study targeting SES in DCCs using validated multidimensional measures. This identifies a clear gap that the current work addresses.

A careful evaluation of the literature finds some shortcomings. First, most previous research has focused on general education instructors or healthcare workers, with little emphasis paid to SES working in day care centers, particularly in Arab and Saudi contexts. Second, past research has frequently explored mindfulness and OS as distinct variables, with no integrated investigations utilizing validated multidimensional measures adapted to the specific demands of special education in day care settings. Third, there is a paucity of complete models that account for the impact of demographic factors (gender, experience, education, and disability severity) within a single analytical framework.

The current study makes numerous novel contributions to the existing literature, notably in the Arab and Saudi contexts:

First, regarding the target population: Unlike earlier Arab research that focused on general special education instructors in school settings (e.g., Al-Kharaan, 2023; Al-Khalidi, 2023; Metwally, 2021), the current study focuses particularly on SES working in DCCs for IWD.

Second, regarding the context: While international research has explored mindfulness and OS among healthcare workers and general educators (Ataç & Avcı, 2024; Janssen et al., 2018). However, no study has explicitly investigated these dimensions among SES in Saudi DCCs.

Third, the study developed and validated two new scales, "Mindfulness Scale (MS)" and "Occupational Stress Scale (OSS)," customized to the Saudi DCC setting.

Fourth, regarding the comprehensive model: The current study blends mindfulness and OS into a coherent framework with different demographic variables, unlike earlier studies that looked at them independently.

Conceptual Framework of the Study

Based on the reviewed theoretical and empirical literature, the current study proposes a conceptual framework in which mindfulness (including mindful observation (MO), accurate description (AD), conscious action (CA), self-acceptance (SA), and emotional balance (EB)), is positioned as an independent variable that predicts OS (including workload pressure (WP), organizational stress (ORS), emotional strain (ES), and life balance (LB)). Demographic factors (gender, years of experience, educational qualification, and disability severity) serve as moderators, as indicated in Figure 1.

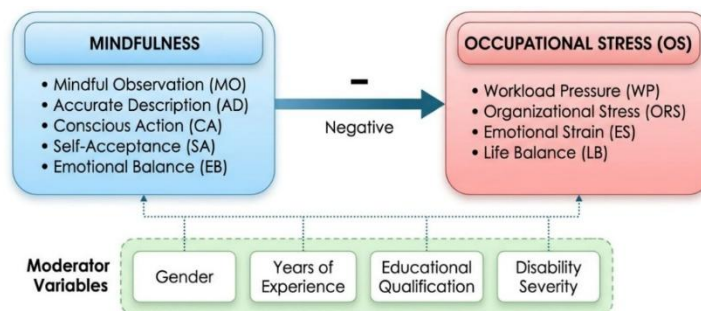


Figure 1. Conceptual Framework of the Study

Based on the conceptual framework and literature review, the present study seeks to answer the following questions:

Q.1. What is the level of mindfulness among special education specialists (SES)?

Q.2. What is the level of occupational stress (OS) among SES?

Q.3. Is there a statistically significant correlation between mindfulness and OS among SES?

Q.4. Are there statistically significant differences in either variable according to gender, years of experience, educational qualification, or severity of disability?

Q.5. Can the level of mindfulness predict the degree of OS experienced by SES working in day care centers for individuals with disabilities?

Methodology

Research Design

This study followed a descriptive correlational research design, which is ideal for investigating the relationships between psychological and occupational characteristics without altering any conditions. The study's purpose was to determine the prevalence of mindfulness and OS among SES, as well as whether mindfulness could significantly predict OS. This strategy made it easier to investigate pre-existing correlations between naturally occurring factors in real-world educational and caregiving settings in Saudi Arabia.

Participants

The study used two independent samples. The first was a pilot (validation) sample of 108 SES (52 male, 56 female). This sample was used solely to investigate the research instruments' psychometric qualities, including exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and reliability testing (Cronbach's alpha). The second sample was the primary study sample, which included 190 people (89 male and 101 female) and was utilized to evaluate the

research hypotheses and answer study questions. To eliminate bias in hypothesis testing, no pilot subjects were included in the main sample.

Participants were chosen using a stratified random sampling method based on gender, years of experience, and educational background. The sampling frame consisted of all SES working in DCCs for IWD in Al-Ahsa, Saudi Arabia. A thorough list of professionals was compiled using official administrative documents from the Ministry of Human Resources and Social Development. Each individual was allocated a unique identification number, and participants were chosen at random using a computerized randomization procedure (random number generator in Jamovi) to provide an equal chance of selection. Table 1 shows the characteristics of the primary study sample (n = 190).

Table 1. Distribution of participants according to demographic variables

Variable	Category	Frequency	Percentage
Gender	Male	89	46.84%
	Female	101	53.16%
Years of experience	<5	112	58.95%
	>=5	78	41.05%
Educational qualification	BSc	137	72.11%
	Postgrad	53	27.89
Severity of disability among IWD	Moderate	68	35.79%
	Severe	122	64.21%
Total		190	100%

Research Instruments

Mindfulness Scale (MS) for SES

The researchers created the Mindfulness Scale (MS) to examine the level of mindfulness among SES workers in DCCs for IWD. Following a review of the relevant literature and consultation with specialists in educational psychology and special education, a prototype version of the scale was developed and refined to cover five aspects. The final tool consisted of 20 items

distributed evenly across the five dimensions (4 per dimension). Each item was scored on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The total score ranged from 20 to 100, with higher scores indicating a greater degree of mindfulness. To facilitate interpretation, mindfulness scores were divided into three categories: low (20-46), moderate (47-73), and high (74-100).

An Exploratory Factor Analysis (EFA) was conducted using the principal components method with Varimax rotation to assess the factorial validity of the scale. The results demonstrated adequate sampling suitability ($KMO = .87$) and a significant Bartlett's test of sphericity ($\chi^2(190) = 1325.74, p < .001$). Five factors emerged, consistent with the theoretical structure, and factor loadings ranged from .54 to .83. The corrected item-total correlations ranged from .48 to .81, while the correlations between each subscale and the total score ranged from .62 to .84 ($p < .01$).

To improve the construct validity of the Mindfulness Scale, a confirmatory factor analysis (CFA) was conducted using structural equation modeling to examine the data's conformity with the five-factor theoretical model. Based on the participants' responses, the analysis revealed a solid fit for the five-dimensional model, as demonstrated by a Comparative Fit Index (CFI) of .93, a Tucker-Lewis Index (TLI) of .92, and a Root Mean Square Error (RMSEA) of .054, all of which are within acceptable statistical limits. The factor loadings for each item ranged from .61 to .84 and were statistically significant at $p < .001$.

This demonstrates that the items provide an adequate representation of their theoretical dimensions. Overall, our findings show that the Mindfulness Scale has high construct validity and is a useful instrument for evaluating the suggested theoretical dimensions in DCCs.

Cronbach's alpha reliability coefficient for the total scale was $\alpha = .89$, with values ranging from .76 to .85 across five dimensions. This demonstrates great internal consistency and stability, making it ideal for research and practical applications in Saudi Arabia.

Occupational Stress Scale (OSS) for SES

OSS was created to determine the key sources and severity of OS encountered by SES working in DCCs for IWD. After studying relevant literature and consulting with experts, the scale was designed around four basic dimensions. The final version had 24 items, six for each dimension, and was scored on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The overall score varied from 24 to 120, with higher scores indicating greater OS. The levels of stress were classified as low (24-55), moderate (56-87), and high (88-120).

EFA with Principal Components Analysis and Varimax Rotation showed factorial validity, good sample adequacy (KMO = .90), and a significant Bartlett's test of sphericity ($\chi^2(276) = 1682.92, p < .001$). Four factors with eigenvalues of more than 1.00 were detected, supporting the suggested theoretical model, with factor loadings ranging from .51 to .82. The adjusted item-total correlations varied from .46 to .79, whereas subscale-total correlations ranged from .58 to .86 ($p < .01$).

The construct validity of the OSS was evaluated using CFA to determine the suitability of a four-dimensional model. The analysis findings showed that the model provided a reasonable fit, as evidenced by a CFI of .91, a TLI of .90, and an RMSEA of .058, indicating a moderate to good match. The factor saturation coefficients for the scale items ranged from .60 to .81, indicating statistical significance at the $p < .001$ level. The total scale had a Cronbach's alpha reliability coefficient of $\alpha = .91$, with subscales ranging from .80 to .87, showing strong internal consistency.

Table 2. Five-Point Likert Scale Levels and Corresponding Score Ranges for Interpreting Participants' Responses

Weighted Mean	Level
1.00 – 1.79	Very Low
From 1.80 – 2.59	Low
From 2.60 – 3.39	Moderate
From 3.40 – 4.19	High
From 4.20 – 5.00	Very High

Procedure

Prior to data collection, King Faisal University's Deanship of Scientific Research granted ethical approval for the study. Permission was also granted by the administrators of the participating DCCs. All individuals volunteered and provided informed consent, ensuring confidentiality and anonymity. Data was gathered both online and on paper, depending on the participants' availability and preferences. Each participant was given detailed instructions on how to complete the two scales, as well as assurances concerning their privacy and the voluntary nature of their participation. Completion of the instruments took approximately 15–20 minutes.

Data Collection and Analysis

Two standardized scales were administered to 108 SES working in DCCs for IWD from diverse regions in Saudi Arabia. The MS was the first measure developed to assess mindfulness. The second instrument was the OSS, which was designed to measure the severity and causes of OS experienced by the SES. Both scales were administered in the second semester of the 2025 academic year.

All statistical analyses were performed using the Jamovi software (version 2.6.44). Descriptive statistics were employed to measure mindfulness and OS. We employed independent samples t-tests to compare gender, years of experience, educational level, and disability severity. Pearson's correlation coefficient (r) was used to assess the relationship between two variables. Finally, a simple linear regression analysis was used to determine the predictive influence of mindfulness on OS among Saudi SES.

Results

The study looks at the association between mindfulness and OS among SES working in Saudi DCCs for IWD. The investigation includes evaluating overall levels and sub-dimensions of mindfulness and OS, as well as assessing differences based on gender, years of experience, educational credentials, and disability severity. Pearson's correlation coefficient was utilized to determine the strength and direction of the relationships between variables. A regression analysis was performed to investigate the extent to which mindfulness can predict OS among SES in the

Saudi setting. The findings give a complete picture of the participants' psychological and professional characteristics, as well as insights into the interaction of mindfulness practices with OS in the demanding field of special education. Therefore, the research questions were addressed as follows.

Q.1. What is the level of mindfulness among special education specialists?

Hypothesis H1 predicted that the level of mindfulness among SES in DCCs is moderate. To test this hypothesis, descriptive statistics such as mean (M) and standard deviation (SD) were used to analyze individuals' overall mindfulness levels and sub-dimensions.

As a result, H1 is supported. The total mean mindfulness score ($M = 3.25$, $SD = .734$) is in the moderate range (2.60-3.39), indicating that SES have moderate levels of mindfulness.

The examination of mindfulness aspects found that SA had the highest mean score ($M = 3.27$, $SD = .747$) and ranked first. AD and CA placed second with equal means ($M = 3.25$), but CA ($SD = .719$) displayed stronger response consistency than AD ($SD = .741$), with CA showing slightly greater consistency. MO and EB finished third with similar averages ($M = 3.24$), with EB ($SD = .725$) having significantly lower variability than MO ($SD = .741$); therefore, EB showed slightly greater response consistency. The study found that SES in DCCs had consistent mindfulness across all dimensions, with somewhat higher mindfulness in present-moment awareness and non-reactivity. This suggests a balanced mindfulness profile. Table 3 presents an overview of the dimension-level findings.

Table 3. Mean Scores of Mindfulness Dimensions among SES in DCCs (N=190)

Dimension	<i>M</i>	<i>SD</i>
Mindful Observation (MO)	3.24	.741
Accurate Description (AD)	3.25	.741
Conscious Action (CA)	3.25	.719
Self-Acceptance (SA)	3.27	.747
Emotional Balance (EB)	3.24	.725
Total Mindfulness	3.25	.734

Note. The detailed item-level statistics for each of the 20 items are presented in Appendix A (Table A1).

Hypothesis H2 predicted that the level of OS among SES in DCCs is moderate. Descriptive analyses using mean scores and standard deviations were used to examine the overall level and sub-dimensions of OS.

Result: H2 is accepted. The overall mean OSS score ($M = 3.24$, $SD = .877$) falls within the moderate range (2.60-3.39), confirming that SES experiences moderate levels of OS.

Analysis of the OSS dimensions indicated that LB had the highest mean score ($M = 3.26$, $SD = .863$), placing first, showing that issues linked to balancing work and personal life are a significant cause of OS. ES scored second ($M = 3.24$, $SD = .895$), indicating the emotional challenges of dealing with IWD. WP rated third ($M = 3.24$, $SD = .867$), indicating moderate stress from workload and task demands. ORS placed fourth ($M = 3.22$, $SD = .883$), showing less, but still significant, stress related to organizational policies and the work environment. Overall, the near-mean scores across the four variables indicate a rather balanced OS profile in which SES faces moderate and diversified stress from workload pressure, emotional strain, organizational setting, and work-life balance.

Table 4. Mean Scores of OS Dimensions among SES in DCCs (N=190)

Dimension	Mean	SD
Workload Pressure (WP)	3.23	.867
Organizational Stress (ORS)	3.22	.883
Emotional Strain (ES)	3.24	.895
Life Balance (LB)	3.26	.863
Total Occupational Stress (OS)	3.24	.877

Note. The detailed item-level statistics for each of the 24 items are presented in Appendix B (Table B1).

Q.3. Is there a statistically significant correlation between mindfulness and OS among SES?

Hypothesis H3 predicted a statistically significant negative correlation between mindfulness and OS. To test this hypothesis, Pearson's correlation coefficient was used. As shown in Table 5.

Result: H3 is accepted. A statistically significant negative correlation was found between total mindfulness and total OS ($r = -.332, p < .001$), indicating that higher mindfulness is associated with lower OS. At the subscale level, significant negative correlations were found between all mindfulness dimensions and all stress dimensions, with r values ranging from $-.195$ to $-.398$, all reaching statistical significance at $p < .05$, $p < .01$, or $p < .001$. The strongest associations appeared between CA and several stress dimensions, such as LB, where $r = -.388, p < .001$. As shown in Figure 2.

Table 5. Correlation between Mindfulness and OS among SES in DCCs

		MO	AD	CA	SA	EB	MS
WP	Pearson's r	-.195**	-.249***	-.302***	-.281***	-.298***	-.313***
	Df	188	188	188	188	188	188
	p-value	.007	<.001	<.001	<.001	<.001	<.001
ORS	Pearson's r	-.11	-.206**	-.268***	-.197**	-.196**	-.231**
	Df	188	188	188	188	188	188
	p-value	.129	.004	<.001	.006	.007	.001
ES	Pearson's r	-.224**	-.300***	-.329***	-.297***	-.319***	-.348***
	Df	188	188	188	188	188	188
	p-value	.002	<.001	<.001	<.001	<.001	<.001
LB	Pearson's r	-.202**	-.273***	-.388***	-.284***	-.315***	-.345***
	Df	188	188	188	188	188	188
	p-value	.005	<.001	<.001	<.001	<.001	<.001
OSS	Pearson's r	-.196**	-.276***	-.346***	-.284***	-.302***	-.332***
	Df	188	188	188	188	188	188
	p-value	.007	<.001	<.001	<.001	<.001	<.001

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

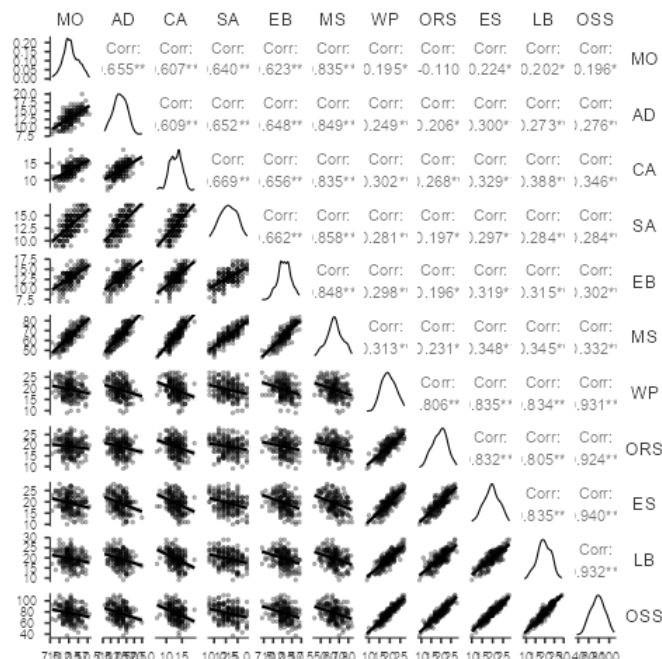


Figure 2. Scatterplot Matrix Showing the Correlation between Mindfulness and OS Dimensions among SES in DCCs

Q.4. Are there statistically significant differences in either variable according to gender, years of experience, educational qualification, or severity of disability?

To address this research question, the study used independent samples t-tests to investigate differences in mindfulness and OS among participants based on gender, years of experience, educational qualifications, and disability severity of children served.

- Gender Differences

Hypotheses H4a and H5a predicted significant gender differences in mindfulness (females > males) and OS (males > females).

Result for H4a: H4a is accepted. Female SES demonstrated significantly higher mindfulness across all dimensions compared to males. As shown in Table 6.

Table 6. Gender Differences in Mindfulness Dimensions among SES in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
MO	Female	101	13.3	2.05	2.96	.004	.43
	Male	89	12.5	1.84			
AD	Female	101	13.4	2.1	2.83	.005	.41
	Male	89	12.6	2.05			
CA	Female	101	13.3	1.95	2.12	.035	.31
	Male	89	12.7	1.89			
SA	Female	101	13.5	1.96	3.61	<.001	.52
	Male	89	12.5	1.96			
EB	Female	101	13.2	1.92	2.20	.029	.32
	Male	89	12.6	1.96			
MS	Female	101	66.8	8.31	3.28	.001	.47
	Male	89	62.9	8.21			

Result for H5a: H5a is accepted. Male SES reported significantly higher OS levels than females in WP, ORS, ES, and total OS. As shown in Table 7.

Table 7. Gender Differences in OS Dimensions among SES in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
WP	Female	101	18.7	3.84	-2.8	.006	-.41
	Male	89	20.2	3.23			
ORS	Female	101	18.7	3.96	-2.31	.022	-.34
	Male	89	20	3.5			
ES	Female	101	18.9	3.85	-2.34	.02	-.34
	Male	89	20.1	3.62			
LB	Female	101	19.2	4.07	-1.42	.158	-.21
	Male	89	19.9	3.38			
OSS	Female	101	75.5	14.81	-2.37	.019	-.34
	Male	89	80.2	12.56			

- Years of Experience Differences

Hypotheses H4b and H5b predicted significant differences in mindfulness based on experience (≥ 5 years $>$ < 5 years) but no differences in OS.

Result for H4b: H4b is accepted for total mindfulness and EB, but not for all sub-dimensions individually. As shown in Table 8.

Table 8. Differences in Mindfulness Levels among SES According to Years of Experience in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
MO	<5	112	12.8	2.06	-1.24	.218	-.18
	≥ 5	78	13.2	1.89			
AD	<5	112	12.8	2.14	-1.72	.087	-.25
	≥ 5	78	13.3	2.06			
CA	<5	112	12.8	1.93	-1.21	.23	-.18
	≥ 5	78	13.2	1.95			
SA	<5	112	12.8	1.97	-1.92	.057	-.28
	≥ 5	78	13.4	2.06			
EB	<5	112	12.6	1.93	-2.99	.003	-.43
	≥ 5	78	13.4	1.90			
MS	<5	112	63.9	8.4	-2.15	.033	-.31
	≥ 5	78	66.5	8.38			

Result for H5b: H5b is accepted. No significant differences in OS were found based on years of experience. As shown in Table 9.

Table 9. Differences in OS Levels among SES According to Years of Experience in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
WP	<5	112	19.7	3.55	1.342	.181	.20
	>=5	78	19	3.73			
ORS	<5	112	19.4	3.92	.421	.674	.06
	>=5	78	19.2	3.63			
ES	<5	112	19.8	3.76	1.314	.19	.19
	>=5	78	19	3.82			
LB	<5	112	19.8	3.92	1.31	.192	.19
	>=5	78	19.1	3.53			
OSS	<5	112	78.7	14.26	1.173	.242	.17
	>=5	78	76.3	13.51			

- Educational Qualification Differences

Hypotheses H4c and H5c predicted significant differences in mindfulness based on education (postgraduate > bachelor's) but no differences in OS.

Result for H4c: H4c is accepted. Postgraduate SES demonstrated significantly higher mindfulness across all dimensions compared to bachelor's degree holders. As shown in Table 10.

Table 10. Differences in Mindfulness Levels among SES According to Educational Qualification in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
MO	BSc	137	12.7	1.96	-3.2	.002	-.49
	Postgrad	53	13.7	1.92			
AD	BSc	137	12.8	2.18	-2.3	.023	-.36
	Postgrad	53	13.6	1.83			
CA	BSc	137	12.7	1.89	-3.21	.002	-.50
	Postgrad	53	13.7	1.91			
SA	BSc	137	12.9	1.95	-2.24	.026	-.35
	Postgrad	53	13.6	2.12			
EB	BSc	137	12.7	1.91	-2.98	.003	-.46
	Postgrad	53	13.6	1.95			
MS	BSc	137	63.7	8.26	-3.31	.001	-.51
	Postgrad	53	68.1	8.25			

Result for H5c: H5c is accepted. No significant differences in OS were found based on educational qualification. As shown in Table 11.

Table 11. Differences in OS Levels among SES According to Educational Qualification in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
WP	BSc	137	19.5	3.76	.55	.583	.09
	Postgrad	53	19.2	3.31			
ORS	BSc	137	19.4	3.97	.535	.593	.08
	Postgrad	53	19.1	3.32			
ES	BSc	137	19.6	3.75	.65	.516	.10
	Postgrad	53	19.2	3.92			
LB	BSc	137	19.7	3.91	.907	.365	.14
	Postgrad	53	19.1	3.4			
OSS	BSc	137	78.2	14.34	.71	.479	.11
	Postgrad	53	76.5	13.02			

- Severity of Disability Differences

Hypotheses H4d and H5d predicted no significant differences in mindfulness or OS based on severity of disability. As shown in Table 12.

Table 12. Differences in Mindfulness Dimensions among SES According to the Severity of Disability in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
MO	Moderate	68	13.2	1.83	1.079	.282	.16
	Severe	122	12.8	2.08			
AD	Moderate	68	13.2	2.07	.903	.368	.14
	Severe	122	12.9	2.15			
CA	Moderate	68	12.9	1.86	-.568	.571	-.08
	Severe	122	13	1.99			
SA	Moderate	68	13.4	2.04	1.557	.121	.23
	Severe	122	12.9	2			
EB	Moderate	68	12.8	2.13	-.981	.328	-.14
	Severe	122	13	1.86			
MS	Moderate	68	65.4	8.43	.492	.624	.07
	Severe	122	64.7	8.53			

Result for H5d: H5d is accepted. No significant differences in OS were found based on disability severity. As shown in Table 13.

Table 13. Differences in OS Dimensions among SES According to the Severity of Disability in DCCs

Dimensions	Group	N	M	SD	t	p	Cohen's d
WP	Moderate	68	19.3	3.66	-.338	.736	-.05
	Severe	122	19.5	3.63			
ORS	Moderate	68	19.2	3.47	-.261	.795	-.04
	Severe	122	19.4	3.98			
ES	Moderate	68	19.1	3.53	-.883	.378	-.13
	Severe	122	19.6	3.93			
LB	Moderate	68	19.4	3.73	-.366	.715	-.05
	Severe	122	19.6	3.81			
OSS	Moderate	68	77	13.33	-.497	.62	-.07
	Severe	122	78.1	14.36			

Q.5. Can the level of mindfulness predict the degree of OS experienced by SES working in day care centers for individuals with disabilities?

Hypothesis H6 predicted that mindfulness significantly predicts OS in a negative direction. To test this hypothesis, a simple linear regression analysis was conducted.

Result: H6 is accepted. Mindfulness is a significant negative predictor of OS.

The regression analysis revealed that the MS is a significant predictor of the OSS, with a correlation of $R = .332$ and a coefficient of determination of $R^2 = .110$. This suggests that mindfulness accounts for around 11% of the variance in OS. The model's F-test was statistically significant ($F(1,188) = 23.3, p < .001$). Additionally, the regression coefficient ($B = -.547, p < .001$) indicated a negative correlation between the two variables. As indicated in Table 14.

Table 14. Simple Linear Regression Analysis between the Two Total Scales ($N = 190$)

Predictor	<i>R</i>	<i>R</i> ²	<i>F</i>	<i>P</i> (Model)	<i>B</i> (Unstandardized)	<i>t</i>	<i>P</i> (<i>B</i>)	Direction
Scale (MS)	.332	.110	23.3	< .001	-.547	- 4.82	< .001	Negative

Discussion

Discussion of Hypothesis H1: Level of Mindfulness

The conclusion that SES in Saudi DCCs had modest levels of mindfulness ($M = 3.25$, $SD = .734$) is consistent with earlier Arab research. Al-Kharaan (2023) discovered modest mindfulness levels among SES in Makkah schools. Similarly, Metwally (2021) found that mindfulness was favorably connected to work satisfaction among SES, although only at a moderate level overall. Al-Ruwaili (2024) discovered that mindfulness predicts occupational well-being among SES at modest baseline levels. The hard nature of the job in DCCs may explain the modest level of awareness. Specialists endure several obligations, emotional problems from working with IWD, and behavioral issues that need ongoing supervision.

These pressures may limit SES's capacity to maintain conscious awareness during daily chores. Furthermore, the lack of formal mindfulness training in professional development programs for SES in Saudi Arabia may explain why levels remain moderate rather than high. From a theoretical standpoint, this lends credence to the notion that mindfulness is a malleable psychological ability that can be enhanced via consistent practice and favorable working situations. While modest, these levels serve as a basis for MBIs. According to the regression analysis, even moderate changes in mindfulness might result in significant decreases in OS. The moderate level also suggests that tailored training programs can help enhance performance.

Discussion of Hypothesis H2: Level of OS

The result that OS among SES was moderate ($M = 3.24$, $SD = 0.877$) is consistent with Al-Khalidi (2023), who observed moderate levels of OS among SES in Makkah. It also agrees with Ismail et al. (2021), who found that job stress is negatively connected to psychological resilience

among SES. Aoun and Kabir (2016) discovered that prevalent stressors among Algerian SES included workload, limited resources, and interpersonal conflicts, which are comparable to the factors identified in the current study (e.g., workload pressure, organizational stress, emotional strain, and life balance). However, some investigations have shown greater amounts of OS. For example, Kaur (2015) and Habeeb et al. (2024) found that SES personnel working with IWD have higher levels of stress and burnout than those working with sensory impairments. The current study's moderate stress levels may imply relative improvements in the Saudi institutional context, where DCCs have placed a greater emphasis on professional stability and support during the last decade. Several variables may contribute to the moderate stress levels. First, the Ministry of Human Resources and Social Development has enlarged and reformed DCCs, resulting in improved organizational policies and clearer job descriptions. Second, Sos and Melton (2025) underlined that SES with even a basic level of mindfulness may manage stress more successfully than those who do not have such awareness. This might explain why SES in this research did not experience exceptionally high levels of stress, despite the rigorous nature of their jobs. The moderate stress levels indicate that existing institutional settings are not unduly stressful; yet, there is still space for improvement through targeted interventions such as stress management programs and counseling services.

Discussion of Hypothesis H3: Relationship Between Mindfulness and OS

Mindfulness was shown to have a substantial negative connection with OS ($r = -.332, p < .001$), suggesting that increased mindfulness is linked to lower stress levels. This discovery provides substantial support for earlier studies. Al-Ruwaili (2024) revealed that mindfulness predicts occupational well-being among the SES. Najmi (2021) discovered a good relationship between coping abilities and mindfulness. Ataç and Avcı (2024) found that MBSR training significantly reduces stress and improves work satisfaction among nurses. Janssen et al. (2018) conducted a comprehensive review and found that MBIs increase emotional well-being and minimize employee burnout. Bolm et al. (2022) discovered that even brief, self-directed mindfulness techniques can reduce OS. At the sub-dimension level, the highest negative

connection was identified between CA and LB ($r = -.388, p < .001$), showing that experts who act with higher awareness and intentionality can better preserve work-life balance. EB has a significant negative association with ES ($r = -.319, p < .001$) and LB ($r = -.315, p < .001$), indicating that emotionally balanced professionals feel less strain and greater life balance. The inverse relationship between mindfulness and OS can be explained by mindfulness's regulating function. Mindful people may digest stresses without making snap judgments, maintain emotional stability throughout difficult situations, and reframe job issues in appropriate ways. This allows SES to respond to behavioral incidents, demanding families, and heavy workloads with greater flexibility and less reactivity. In Saudi Arabia, where mental health awareness has grown in recent years, our findings demonstrate that even moderate levels of mindfulness can protect against stress in demanding professional contexts such as DCCs. This contributes to the incorporation of MBIs into professional development programs.

Discussion of Hypotheses H4a and H5a: Gender Differences

Female SES workers demonstrated significantly higher levels of mindfulness across all dimensions compared to their male counterparts, with Cohen's d values ranging from .31 to .52. Conversely, female SES workers showed significantly lower levels of OS than male SES workers (Cohen's $d = -.34$ for total OS). This finding aligns with Al-Kharaan (2023), who reported increased emotional awareness among female SES workers, and Metwally (2021), who found that female SES workers exhibit higher mindfulness and job satisfaction. The conclusion that male SES workers experience greater occupational stress is consistent with Al-Khalidi (2023), who documented gender differences in OS among SES workers in Makkah. A plausible explanation is that female Saudi SES workers often display greater emotional attunement and empathy in caregiving roles, which enhances their ability to interact mindfully and regulate emotions effectively. Furthermore, social variables may play a role; women in Saudi society may develop stronger emotional awareness as a result of their caring obligations, both professionally and at home. Male SES had greater stress levels, which might be attributed to differing role expectations, coping methods, or gendered views of professional pressure within the institutional environment.

Gender-sensitive mindfulness training programs might be devised to meet the special requirements of male SES, who appear to be more stressed and have poorer mindfulness. However, such interventions would be beneficial to both genders.

Discussion of Hypotheses H4b and H5b: Years of Experience

More experienced SES (≥ 5 years) had substantially higher total mindfulness ratings (Cohen's $d = -.31, p = .033$), especially in EB (Cohen's $d = -.43, p = .003$). There were no significant changes in OS based on years of experience (all $p > .05$). The mindfulness finding is consistent with the findings of Al-Ruwaili (2024) and Metwally (2021), who discovered that experience helps to improve reflective awareness and adaptive coping skills. The absence of OS differences is consistent with Kurnia's (2015) finding that organizational considerations may outweigh individual experience in influencing stress levels. However, this contradicts some research that revealed lower stress levels among more experienced workers. Higher awareness among experienced SES may be the consequence of cumulative job learning. Over time, specialists improve their emotional regulation methods and learn to adapt to difficult situations with greater awareness. The lack of stress disparities implies that in Saudi DCCs, identical work rules, set case assignments, and uniform administrative responsibilities may result in similar stress levels regardless of professional tenure. Less experienced experts may receive greater supervision and assistance, whereas more experienced specialists may face more demands and administrative obligations, therefore balancing stress levels across groups. Stress reduction programs should target all SES, regardless of experience level, because stress is uniform across groups. However, mindfulness training may be especially advantageous for inexperienced professionals in terms of accelerating the development of attentive awareness.

Discussion of Hypotheses H4c and H5c: Educational Qualification

Postgraduate SES showed substantially greater awareness across all aspects (Cohen's d ranging from $-.35$ to $-.51, p < .05$ for all) than bachelor's-degree holders. There were no significant changes in OS based on educational degree (all $p > .05$). This conclusion is consistent with

Metwally's (2021) observation that more education is related to increased mindfulness among SES. It is also consistent with Mohamed et al. (2025), who found that educational level influences mindfulness among special education instructors. Higher education levels may improve mindfulness abilities by increasing exposure to contemplative activities, critical thinking, and professional self-awareness. Postgraduate programs frequently promote self-reflection, evidence-based practice, and emotional intelligence, all of which may directly improve mindfulness. However, the lack of OS differences implies that work-related demands in DCCs are influenced more by organizational and environmental variables than academic achievement. Regardless of education level, all SES employees endure similar task demands, administrative constraints, and emotional obstacles. While greater education promotes mindfulness, stress-reduction therapies should target all SES groups, regardless of educational level. Mindfulness training may be successfully offered to both bachelor's and postgraduate degree holders.

Discussion of Hypotheses H4d and H5d: Severity of Disability

There were no significant changes in mindfulness or OS across impairment severity (moderate vs. severe). All p-values were more than .05, with minor effect sizes (Cohen's d ranged from - .14 to .23). This research contradicts Kaur (2015), who found that SES workers with intellectual disabilities had more stress and burnout than those dealing with hearing or visual impairments. However, it is consistent with more recent findings, which suggest that organizational and administrative variables are greater predictors of stress than client attributes (Aoun & Kabir, 2016; Al-Khalidi, 2023). Habeeb et al. (2024) found that OS in such circumstances is impacted not only by client attributes but also by organizational and administrative components in the workplace. The lack of differences based on disability severity suggests that the causes of OS among SES are primarily related to organizational and administrative factors (e.g., workload, role clarity, institutional support, administrative responsibilities) rather than the clients' disabilities. Standardized work methods, set timetables, identical paperwork requirements, and consistent supervision structures in Saudi DCCs are expected to result in stress levels that are equivalent across disabilities. Ismail et al. (2021) backed up this claim, discovering that constant work

surroundings and job duties led to steady levels of OS, even when case complexity differed. It should be emphasized that the study did not explicitly assess organizational elements such as leadership style, institutional policies, or team dynamics, which might have influenced this outcome. Future study utilizing qualitative approaches or including organizational characteristics is required to confirm this perspective. Therapies that address organizational factors (e.g., decreasing workload, enhancing administrative assistance, and clarifying job duties) may be more successful in lowering OS than therapies that focus only on disability-specific training. Institutions should prioritize strengthening the organizational atmosphere over thinking that stress is mostly caused by the severity of disability services.

Discussion of Hypothesis H6: Mindfulness as a Predictor of OS

Mindfulness substantially predicts OS ($B = -.547$, $p < .001$, $R^2 = .110$). Mindfulness accounted for around 11% of the variation in OS. This conclusion is in line with other earlier research. Ataç and Avcı (2024) discovered that MBSR training significantly lowered stress levels in nurses. Janssen et al. (2018) conducted a comprehensive study and found that MBIs reduce stress and promote mental health in employees. Bolm et al. (2022) discovered that even brief mindfulness activities reduced OS in hospitality workers. According to Sos and Melton (2025), healthcare personnel believe mindfulness is a useful approach for lowering stress and weariness. Al-Ruwaili (2024) discovered that mindfulness predicts occupational well-being among Saudi SES.

The negative regression coefficient ($B = -.547$) shows that for every one-point rise in mindfulness score (on a scale of 20 to 100), OS falls by about 0.55 points. This underlines mindfulness's role as a psychological resource for coping with work-related stress. Other factors not included in this model account for the remaining 89% of OS variation, including corporate policies, leadership styles, team dynamics, personal life situations, and larger socioeconomic issues. The result that mindfulness explains 11% of the variance in OS has significant practical implications. In the Saudi special education environment, this effect size shows that mindfulness is a significant, if not unique, protective factor against OS. Increasing mindfulness among the SES

could lead to moderate but measurable reductions in stress levels. This supports the integration of MBIs into professional development programs for SES in Saudi DCCs.

Discussion of Effect Size and Practical Significance

The regression analysis found that mindfulness explained roughly 11% of the variation in OS ($R^2 = .110$). According to Cohen's (1988) behavioral science norms, this is a small-to-medium effect size. While this proportion may look insignificant, it is really rather significant in the context of occupational health research, where stress is often caused by a combination of organizational and individual variables. Comparable studies have revealed comparable impact sizes; for example, a meta-analysis by Janssen et al. (2018) discovered that mindfulness-based therapies explained between 8% and 15% of variation in work-related stress outcomes among healthcare workers. In the Saudi special education setting, this effect size shows that mindfulness is a significant, if not unique, protective factor against OS. Practically, this suggests that increasing mindfulness among SES may result in moderate but measurable stress reductions, hence encouraging the incorporation of mindfulness training into professional development programs.

Interpretation within the Saudi Context

The observed outcomes are understandable in light of Saudi Arabia's cultural and institutional setting. Over the last decade, the Ministry of Human Resources and Social Development has expanded and reformed DCCs for IWD, establishing improved organizational policies, clearer job descriptions, and more manageable professional workloads. These improvements are most likely responsible for the mild stress levels found in this study, as well as the lack of stress disparities depending on experience, education, and handicap severity. Furthermore, the Saudi societal and religious context, which promotes acceptance, thankfulness, and inner calm, may naturally strengthen aspects of mindfulness. Trust in divine will and inner serenity are intimately related to mindfulness concepts, which act as an unconscious psychological barrier against stress. This cultural synergy may explain why Saudi experts have modest stress levels as compared to professionals in more individualistic or competitive settings. However, the

lack of structured mindfulness training programs in professional development courses explains why mindfulness levels are still moderate. This gives an opportunity for educational policymakers to include MBIs in ongoing professional development programs for SES.

Conclusion

The current study provides insight into the relationship between mindfulness and OS among SES workers in Saudi DCCs during IWD. The findings reveal a significant negative relationship between the two variables, showing that enhanced mindfulness correlates with decreased OS. Furthermore, gender, years of experience, and educational degree were found to impact mindfulness levels, although OS remained rather stable across demographic variables. These findings highlight the psychological and professional benefits of mindfulness as a tool for enhancing emotional balance, self-regulation, and professional performance among educators working in stressful settings.

This paper contributes to the growing corpus of research stressing the relevance of mental well-being in educational and rehabilitative settings by demonstrating the crucial role of mindfulness in OS regulation. The findings highlight the necessity of adopting mindfulness practices into institutional policies and professional training programs, which will eventually enhance SES mental health and professional sustainability in Saudi Arabia.

Recommendations

According to the findings, MBIs should be routinely integrated into professional development programs for SES to improve emotional regulation, resilience, and work satisfaction. Educational and rehabilitative institutions should provide supportive settings that encourage mental health by providing stress management programs, counseling services, and mindfulness-based leadership practices. To improve experts' coping abilities and minimize OS, policymakers and educational leaders should include mindfulness training into their preparatory courses, as well as continuing professional development. Furthermore, institutional initiatives should aim to foster a working culture that values emotional balance, reflective practice, and psychological safety,

therefore improving both professional performance and the quality of care provided to IWD in the Saudi setting.

Limitations and Future Research

Despite the study's substantial contributions, a number of shortcomings should be noted. First, the study used a cross-sectional design, which limits the causal relationship between mindfulness and OS. Second, the sample was restricted to Saudi DCCs, which may limit the findings' applicability to other cultural or professional contexts. Third, using self-reported measurements may result in response bias or social desirability effects.

Future research should overcome these limitations by utilizing longitudinal and experimental methodologies to establish causal relationships between mindfulness and stress reduction. Studies might also investigate the efficacy of specific MBIs tailored to SES, comparing their outcomes across various disability types and educational contexts. Furthermore, qualitative research could provide deeper insight into professionals' lived experiences, revealing contextual and cultural factors that influence mindfulness and OS.

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Ethics Statements: The King Faisal University Human Research Ethics Committee approved this study, assuring that it followed recognized ethical norms for social science research. Participants were fully informed about the study's aims, methods, and rights, which included the ability to participate willingly and leave at any time without penalty. The data was collected in complete confidentiality, and all replies were anonymized and utilized only for academic and research reasons.

Informed Consent: Before beginning the study, each participant gave informed approval.

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