

RELATIONSHIP BETWEEN MINDFULNESS PRACTICES, STRESS LEVELS, AND WELL-BEING AMONG LECTURERS AT A NIGERIAN UNIVERSITY

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Accepted for publication 21/5/2025

ABSTRACT

Background: University teachers (lecturers) face significant stress from their teaching, research, and service duties which negatively impact their health and well-being. Mindfulness, characterized by present-moment awareness and non-judgmental acceptance, can reduce stress, alleviate anxiety and depression, and improve job satisfaction, performance, and work-life balance.

Aim: To examine how mindfulness influences work stress and overall well-being of lecturers at the Nnamdi Azikiwe University, Nnewi Campus, Nigeria.

Materials And Methods: This was a cross-sectional study that involved 73 lecturers, with a mean age of 45.7±9.945.7 years. The Five Facets of Mindfulness, work stress, Work-Related Quality Of Life Scale, and WHO-5 Well-Being Questionnaires were used to assess mindfulness, stress level, and well-being respectively. Data was analyzed with descriptive statistics and Spearman's

rank correlation with level of significance set at <0.05.

Results: No significant differences were found in mindfulness (K = 4.213, p = 0.837) or work stress (K = 10.128, p = 0.256) among lecturers of different departments. Male lecturers reported significantly higher work-related quality of life and general well-being than females (WRQoL: U = 429.5, p = 0.023; WHO-5: U = 362.5, p = 0.002). However, no significant correlations were observed among mindfulness, work stress, well-being, age, or years of lecturing experience.

Conclusion: The findings suggest that mindfulness, stress levels, and well-being are not significantly correlated. While gender differences in well-being were evident, other demographic factors such as age and professional experience showed no significant influences.

Keywords: Mindfulness, Stress level, Well-being, Lecturers, Work-related quality of life

INTRODUCTION

Today's educational system hinges heavily on the dynamic performance of the academic staff, otherwise known as lecturers¹. A university lecturer is a teacher, and an expert employed in a university to teach on a part-time, full-time, contract, adjunct, or voluntary basis². Lecturers in higher educational institutions are primarily responsible for teaching undergraduates and postgraduates in areas designated by the Head of Department, conducting research and producing related outputs regarding

their personal objectives, securing research funding, and participating in scholarly and professional communities³. They also supervise or assist with supervising students at various levels, contribute to curriculum development and implementation, and help create learning materials, plan coursework, and track student progress and attendance³. Lecturers put in much energy to get the most out of students, which may result in stress². In addition, stress at work is a growing problem⁴. However, evidence suggests that mindfulness may reduce stress⁵.

Mindfulness refers to observing the happenings in the present moment without passing judgment on it⁶. Mindfulness can be applied in different contexts, including technology, therapy, or way of life⁷. Mindfulness is used in settings such as parliaments, schools, and universities. Mindfulness involves a mental state where individuals are aware of events as they occur and are adaptable in interpreting them, enabling them make the most of their circumstances⁸. This practice centers on awareness and emphasizes the importance of focusing on immediate experiences, such as bodily sensations, emotional responses, mental imagery, mental dialogue, and perceptual experiences⁹.

Modern conceptualizations of mindfulness emphasize the importance of accepting one's experiences and approaching them with an open mindset. Attending to experiences with a questioning, dispassionate, and nonreactive perception forms the basis of a receptive attitude. Accepting reality is not a passive attitude⁹. Those who practice mindfulness are less sensitive to emotional cues and can better control their emotions and reactions to stressful situations¹⁰.

Work stress occurs when employees take on tasks that surpass their capabilities or when the resources needed to complete these tasks are inadequate. This situation often arises when there is a significant gap between compensation and the expectations placed on employees¹¹. Stress negatively impacts employees in several ways, including their reaction, stimulus, and transaction. When lecturers are assigned too many classes in a semester, they may respond differently based on their coping skills and personal

characteristics, which may be positive or negative.

A study highlighted that how lecturers communicate with management and students is crucial to their experience of stress². The body responds to stress by releasing hormones such as cortisol, adrenaline, and noradrenaline, which activate the autonomic and central nervous systems to preserve homeostasis, enabling us to react and adjust to daily activities, some of which may be stressful¹². To achieve happiness, health, and success, one must react correctly to anticipated and unforeseen stressors, which is known as well-being¹³.

In philosophy, "well-being" refers to what is inherently or ultimately beneficial to an individual. In everyday usage, "well-being" typically pertains to health¹⁴. In the past decade, the higher education sector has undergone substantial and diverse changes, which have affected the well-being of academic staff¹⁵. Furthermore, there has been growing concern about the well-being of academic staff, with many being reported as at risk of experiencing burnout¹⁶. Stress and well-being are inversely associated.¹⁷

Mindfulness training can lower the prevalence of mental disorders that result in anxiety and/or depression¹⁸. Furthermore, mindfulness boosts a person's performance, job satisfaction, and work-related well-being¹⁹. It also helps lower stress levels, which are connected to health problems and increased rates of attrition in educational settings.¹⁹ Practicing mindful behavioral responses to stressful situations enhances our emotional regulation and reduces cortisol, the stress hormone, which activates the prefrontal cortex, helping individuals

gain a clearer perspective and stay calm during challenging situations.¹⁰ The benefits of mindfulness have been reported in lecturing, law, and medicine.¹⁹ Although being unmindful can have adverse effects, practicing and cultivating mindfulness can improve one's well-being and foster greater awareness of oneself and the outside world.²⁰ Mindfulness can enhance well-being by helping individuals cultivate flexible attention and embrace a perspective focused on experiences.²¹ This approach reduces their dependence on automatic thought patterns and ineffective emotion regulation strategies.²¹ Mindfulness practice offers numerous benefits, such as enhanced problem-solving, better decision-making, greater creativity, improved interpersonal relationships, and more effective communication. It is essential in the workplace.²²

Therefore, this study aimed to examine how mindfulness practices influence work stress level and overall well-being among lecturers at the College of Health Science, Nnamdi Azikiwe University, Nnewi Campus.

MATERIALS AND METHODS

Research design

This study was a cross-sectional analytical survey, which utilized a stratified sampling technique to recruit 73 lecturers at the College of Health Sciences, Nnamdi Azikiwe University, Okofia, Nnewi, Anambra State.

Inclusion criteria

Male and female Lecturers in the College of Health Sciences, Okofia, Nnewi in Anambra

State who have been in the occupation on full time basis for at least 2 years.

Study instruments

The Five Facets Of Mindfulness Questionnaire (FFMQ) (short form) was used to determine the effect of mindfulness on psychological health of individuals. The Work Stress Questionnaire (WSQ) revised version was used to identify those at risk of being placed on the sick list unexpectedly because of work-related stress. The Work-Related Quality Of Life (WRQoL) scale was used to assess employees' perceived QoL. The World Health Organization (WHO)-5 well-being scale was used to assess subjective well-being in a broad and general manner.

Data collection

Ethical approval was sought and obtained from the ethical review committee of Faculty of Health Science and Technology, Nnamdi Azikiwe University, Nnewi campus before commencing the study. The purpose and aim of the study were explained to the participants, and informed consent was sought thereafter, and only those who gave consent participated in the study. The questionnaires were administered to the participants, and the questionnaires that were completed were retrieved.

Data analysis

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the sociodemographic characteristics of the participants and their responses to the

mindfulness, work stress, and well-being questionnaires. Inferential statistics were used to examine differences and relationships among variables. The Kruskal–Wallis test was used to compare mindfulness (FFMQ15), work stress (WSQ), and well-being scores (WRQoL and WHO-5) across departments and age categories, while the Mann–Whitney U test assessed gender-based differences in these variables. Additionally, Spearman’s rank-order correlation test was used to determine the associations between mindfulness, work stress, well-being, and years of lecturing experience. Statistical significance was set at $p < 0.05$.

RESULTS

Sociodemographic characteristics of the participants

Seventy-three lecturers, 41 (61.6%) males and 28 (38.4%) females, at the College of Health Sciences, Okofia, Nnewi participated in this study, with a mean age of $45.7 \pm 9.945.7$ years. Table 1 shows the sociodemographic characteristics of the participants.

Table 2 presents a comparison of the levels of mindfulness across the various departments in the College of Health Sciences using Kruskal–Wallis test. The results showed no significant differences in mindfulness scores ($P=0.837$, $K= 4.213$). WSQ scores across departments were also evaluated using Kruskal–Wallis test, which showed no significant difference in work stress levels across the departments ($P= 0.256$, $K= 10.128$).

A Mann–Whitney U test was utilized to compare gender work well-being (WRQoL) and general well-being (WHO5) scores. The analysis revealed significant differences between male and female lecturers (WRQoL: $U = 429.5$, $p = 0.023$; WHO5: $U = 362.5$, $p = 0.002$) (Table 3). Additionally, to evaluate potential gender differences in mindfulness and work stress, a Mann–Whitney U test was also conducted, which revealed no significant gender differences in mindfulness or work stress scores (Mindfulness [FFMQ15]: $U = 598$, $p = 0.716$; Work Stress [WSQ]: $U = 580.5$, $p = 0.574$).

Spearman’s rank order correlation analysis was performed to evaluate the relationship between mindfulness and work stress, revealing no significant correlation ($\rho = 0.228$, $P = 0.052$) (Table 4). Spearman’s rank order correlation was also used to examine the correlation between mindfulness and overall well-being (WHO5 and WRQoL), which indicated no significant correlation (For WHO5: $\rho = -0.009$, $P = 0.942$; For WRQoL: $\rho = -0.020$, $P = 0.868$). Furthermore, Spearman’s rank order correlation was also used to examine the correlation between years of lecturing experience and well-being (WHO5 and WRQoL) scores, which showed no significant correlation ($\rho = -0.019$, $P = 0.875$; and $\rho = 0.082$, $P = 0.489$, respectively). The relationship between years of lecturing experience and mindfulness (FFMQ15) was analyzed using Spearman’s rank order correlation, which revealed no significant correlation ($\rho = 0.151$, $P = 0.202$). Finally, the correlation between years of lecturing experience and

work stress was analyzed, which showed no significant correlation ($\rho = 0.062$, $P > 0.05$).

The Kruskal–Wallis test was performed to assess potential age-based differences in mindfulness (FFMQ15), work stress (WSQ),

and well-being (WHO5 and WRQoL). The results were: Mindfulness (FFMQ15): $\chi^2 = 5.507$, $p = 0.239$; Work stress (WSQ): $\chi^2 = 5.831$, $p = 0.212$; Well-being (WHO5): $\chi^2 = 3.152$, $p = 0.533$, Well-being (WRQoL): $\chi^2 = 1.766$, $p = 0.779$ (Table 5).

Table 1. Sociodemographic characteristics of the participants

Variable	Frequency (%)	Total (%)	Mean ± SD
Age (years)		73 (100%)	3.29 ± 1.13
20–29	1 (1.4%)		
30–39	23 (31.5%)		
40–49	26 (35.6%)		
50–59	16 (21.9%)		
60–69	7 (9.6%)		
Gender		73 (100%)	1.38 ± 0.49
Male	45 (61.6%)		
Female	28 (38.4%)		
Department		73 (100%)	4.74 ± 2.32
Anatomy	14 (19.2%)		
Biochemistry	7 (9.6%)		
Environmental Health Science	8 (11.0%)		
Human Nutrition and Dietetics	3 (4.1%)		
Medical Laboratory Science	13 (17.8%)		
Medical Rehabilitation	9 (12.3%)		
Nursing	5 (6.8%)		
Human Physiology	7 (9.6%)		
Radiography	7 (9.6%)		

Table 2. Comparison of the five facets of mindfulness and work stress scores across departments

Variable	Department categories									K value	p-value
	1	2	3	4	5	6	7	8	9		
FFMQ15	32.93	43.71	40.00	50.33	30.73	34.78	38.70	37.71	41.86	4.213	0.837
WSQ	34.50	39.43	36.25	15.83	48.00	35.94	38.40	23.64	42.79	10.128	0.256

Key:

1, Anatomy; 2, Biochemistry; 3, Environmental Health Science; 4, Human Nutrition and Dietetics; 5, Medical Laboratory Science; 6, Medical Rehabilitation; 7, Nursing; 8, Human Physiology; 9, Radiography; FFMQ15; Five facets of mindfulness questionnaire; WSQ, Work stress questionnaire

Table 3. Correlation between gender and well-being, mindfulness, and work stress

Variable	Gender categories		U value	p-value
	1	2		
WRQoL	41.46	29.84	429.5	0.023
WHO-5	42.94	27.45	362.5	0.002
Mindfulness	38.29	38.14	598	0.716
Work Stress	35.90	38.77	580.5	0.574

Key:

WRQoL, Work-related quality of life; WHO-5=World Health Organization well-being index; 1, Male; 2, Female

Table 4. Correlation between mindfulness with work stress and well-being and years of lecturing with mindfulness, stress level, and well-being

Variables	rho-value	p-value
Mindfulness and Work Stress	0.228	0.052
Mindfulness and WHO-5	-0.009	0.942
Mindfulness and WRQoL	-0.020	0.868
Years of Lecturing and Mindfulness	0.151	0.202
Years of Lecturing and Work Stress	0.062	0.601
Years of Lecturing and Well-Being (WHO-5)	-0.019	0.875

Variables	rho-value	p-value
Years of Lecturing and Well-Being (WRQoL)	-0.082	0.489

WRQoL, Work-related quality of life; WHO-5, World Health Organization well-being index

Table 5. Comparison of mindfulness, work stress and well-being among the different age categories

Variables	Age category					K value	p-value
	1	2	3	4	5		
Mindfulness	10.00	42.37	31.58	36.84	43.71	5.507	0.239
Work Stress	43.00	33.22	38.77	44.88	24.00	5.831	0.212
Well-Being (WHO5)	32.00	43.20	32.75	35.69	36.14	3.152	0.533
Well-Being (WRQoL)	27.00	38.65	39.56	34.06	30.21	1.766	0.779

Key:

1, 20–29; 2, 30–39; 3, 40–49; 4, 50–59; 5, 60–69; WRQoL, Work-related quality of life; WHO-5, World Health Organization well-being index

DISCUSSION

This study investigated the relationship between mindfulness, work stress, and well-being among lecturers in the College of Health Sciences, Okofia, Nnewi. A major finding was the absence of significant differences in mindfulness levels across various academic departments via the Kruskal–Wallis test, which suggests that departmental affiliation does not substantially influence the development or expression of mindfulness among lecturers. This aligns with existing literature, which posits that mindfulness is not inherently tied to occupational roles but can be cultivated through individual practice and training across varied environments.^{23,24} The uniformity in mindfulness scores across departments also implies that the pressures or demands specific to different academic

disciplines do not differentially affect lecturers’ capacity for present-moment awareness and non-judgmental observation—core tenets of mindfulness.

Similarly, no significant difference was observed in work stress levels across departments, indicating that stressors may be systemic rather than role-specific. This finding supports that of a study that stress among academic staff is often related to institution-wide issues such as workload, administrative burdens, research expectations, and limited support structures, rather than challenges unique to disciplines.²⁵ These systemic stressors can create a pervasive atmosphere of pressure, affecting staff across the board regardless of departmental alignment.

Gender-based analysis revealed that male lecturers reported significantly higher levels

of general well-being (WHO-5) and work-related quality of life (WRQoL) than female lecturers, suggesting a potential gender disparity in the experience or perception of well-being within the academic environment. Previous studies have identified similar patterns, attributing them to societal roles, work-life balance challenges, and gender-based occupational stress.^{26,27} Women in academia often face additional expectations, such as caretaking responsibilities, which may exacerbate stress and reduce perceived well-being. These gendered dynamics could also reflect unequal access to institutional resources or differences in coping strategies between male and female lecturers.

However, no significant gender differences were found in mindfulness or work stress scores, indicating that while male and female lecturers may experience different levels of well-being, their mindfulness capacities and perceived work stress levels are comparable. This finding is consistent with a study that suggested that although gender can influence emotional health outcomes, it does not necessarily affect dispositional mindfulness.²⁸ It may also suggest that mindfulness, as measured by the FFMQ, operates similarly across genders in this academic context.

The correlation analysis revealed no significant relationships between mindfulness and work stress, nor between mindfulness and the two well-being indicators (WHO-5 and WRQoL). Although a weak positive trend was observed between mindfulness and work stress, it was not significant. This finding contrasts with numerous studies that have reported

mindfulness to be a protective factor against stress and a contributor to enhanced well-being.^{9,29,30} However, a study reported similar non-significant results, suggesting that the benefits of mindfulness may not be universal and could depend on the frequency, depth, or authenticity of its practice.³¹ It is also possible that external stressors, such as institutional challenges or economic constraints, may be more dominant influences on stress and well-being than internal resources like mindfulness.

Furthermore, no significant correlations were observed between years of lecturing experience and any of the measured variables—mindfulness, work stress, or well-being, suggesting that tenure or time in the profession does not necessarily translate into increased coping ability, reduced stress, or higher well-being. While it may be assumed that more experienced lecturers develop better coping strategies over time, the findings indicate that this is not always the case. This aligns with a study that found that experience alone may not mitigate stress unless supported by targeted interventions and supportive workplace environments.³²

The study also found that age was not significantly associated with differences in mindfulness, stress, or well-being. This further supports the idea that these psychological constructs are not heavily influenced by chronological age. Consistent with a study whose findings imply that individuals across age groups can cultivate mindfulness and experience similar levels of well-being and stress.³³ Therefore, interventions aimed at improving mindfulness and well-being should include

all age brackets within the academic workforce.

Altogether, these findings paint a nuanced picture. While mindfulness has been widely promoted for its benefits in reducing stress and improving well-being, its impact in this academic setting appears limited, at least when considered in isolation. The lack of significant relationships may point to other intervening variables, such as institutional support, personal life challenges, or environmental stressors that were not captured in this study. Moreover, the significant gender differences in well-being but not in mindfulness or stress highlight the need for gender-sensitive approaches to promoting mental health and work satisfaction in academia.

Limitations

The cross-sectional design limits the ability to establish causal relationships between mindfulness, work stress, and well-being. The data represent a snapshot in time and may not capture fluctuations in stress or mindfulness over longer periods. Second, the relatively small sample size, limited to lecturers within an institution, may restrict the generalizability of the findings to other academic environments or geographical regions. Additionally, the reliance on self-reported questionnaires introduces the potential for response bias. Lastly, the study did not control for external variables such as workload intensity, personal life stressors, or access to mental health resources, which may have influenced participants' levels of stress or well-being independently of mindfulness.

CONCLUSION

The findings revealed no significant associations between mindfulness and stress levels or well-being, and no notable differences in these variables across departments, age groups, or years of lecturing experience. However, significant gender differences were observed in general and work-related well-being, with male lecturers reporting higher scores than their female counterparts. These results suggest that while mindfulness may offer personal benefits, its influence on occupational stress and well-being in academic settings may be limited or shaped by broader systemic and individual factors. The uniformity of experiences across demographic and professional variables also points to shared institutional stressors rather than isolated or role-specific issues.

Competing interests

The authors declare no competing interests.

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