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Socio-Demographic Factors And Occupational Stress As Correlates Of Mental Health Outcomes Among University Employees In Ogun State, Nigeria

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Abstract

This study assessed socio-demographic factors and occupational stress as correlates of mental health outcomes among university employees in Ogun State, Nigeria. The study adopted a descriptive survey design and used a multi-stage sampling technique to select the 422 participants. A structured questionnaire was used for data collection, which was pilot tested through test-re-test. Two hypotheses were formulated and tested. Analysis of data was done using Chi-square and PPMC fixed at the 0.05 level of significance. The findings revealed a significant association between socio-demographic variables (age, gender, marital status, and educational level) and mental health outcomes (anxiety and depression) among employees of the universities; significant association between socio-demographic variables (age, gender, marital status, and educational level) and the level of occupational stress among employees of the universities; and, significant correlation between occupational stress and mental health outcomes among employees of the universities. This study established the existence of depression and anxiety among the universities employees, as there are significant and positive relationships between job stress, depression and anxiety. The results obtained clearly show that workers' hardiness needs to be strengthened and that effective measures are required to prevent occupational stress.

Keywords: Depression, Suicidal ideation, occupational stress, mental health, university employees

Introduction

Employees' mental health has become more and more recognized as an essential factor in their overall health and that poor mental health and stress can play a significant role in a number of physical conditions, such as hypertension. In addition, poor mental health can lead to abuse of employees, which severely affects their ability to contribute significantly to their personal and professional lives. The problem is, mental health issues have a negative impact on productivity and profit and an increase in costs of addressing the problem is directly on employers and employees.

This study is concerned with two of the mental health outcomes which are depression and anxiety. Depression is a common mental health disorder that has affected 280 million people worldwide (WHO, 2020). The report suggests that around 5 % of the adult population globally suffers from depression. Depression can have a significant impact on an individua1's overall well-being and daily functioning. Depressive disorders are a leading cause of disability worldwide and can significantly impair an individual's ability to conduct daily activities (WHO, 2020).

Previous studies have shown that depression can significantly impact on daily activities, including work, social activities, and personal relationships (Huang et al., 2022; Luppa et al., 2012). Depression can also have a negative impact on physical health, leading to an increased risk of chronic health conditions (Iancu et al., 2020; Lopresti et al., 2013). Symptoms of depression are sleeping disturbance, interest/pleasure reduction, guilt feelings or thoughts of worthlessness, energy changes/fatigue, concentration/attention impairment, appetite/weight changes, psychomotor disturbances, suicidal thoughts, depressed mood (Ayodele, et al., 2022).

Anxiety on the other hand is an instinctive response to stress to regulate focus and alertness during a perceived threat or adverse conditions (Piscitelli, 2021). When heightened, it becomes an issue when it produces an intense and excessive response that hinders a person's major life activities (Sokolowska & Hovatta, 2013). Lack of concentration, poor time management, disorganization, and the inability to cope with stress are all symptoms of anxiety and conditions that create obstacles for learning (Hughes et al., 2016). These symptoms can stimulate avoidance behavior towards the anxiety-provoking stimulus, such as learning new skills in the workplace (Muschalla et al., 2010).

However, occupational stress is generally acknowledged as a global phenomenon with significant health and economic consequences in both developed and developing countries. Generally defined as a gradual process in which individual

cognitive assessments of occupational stressors generate adverse health with severe behavioral consequences (Suleman et al., 2018), occupational stress results from a "toxic" work environment such as poor control, high work demands, lack of information (Moreno-Fortes et al., 2020), extreme pressure (Obasohan & Ayodele, 2014) and low decision-making latitude.

According to studies conducted by Schussler et al. (2016), Shen & Slater (2021), and Sokal et al. (2020), university educators have been reporting elevated levels of stress over the past ten years, which suggests that they may not have all the tools they need to manage stress and prevent diseases and disorders related to stress. One such disease is depression. Not surprisingly, stress and depression are on the rise among university instructors, which raises the possibility that their understanding of the conditions may be inadequate. When knowledge is inadequate, perception and attitude formation may also be inadequate and hindered. Furthermore, current research on stress and depression in Nigerian universities has only evaluated the conditions' levels and contributing variables (Obi & Okobia, 2021; Peretomode, 2012).

Nevertheless, none of these studies have looked into university instructors' attitudes, perceptions, or knowledge of stress and depression. These elements affect their behaviour towards the issues as well as how they perceive the issues to affect them (Ajzen, 2001; Qiong, 2017), which may affect their coping mechanisms for the components (stress and depression) and their decision to seek or not seek assistance (Ghosh & Tabassum, 2021). Furthermore, they adversely affect employee morale. These changes, particularly in the working environment within the organization, have already had a mental influence on employees. This study aims to assess the relationship between mental health outcomes among employees in selected private universities in Ogun State, Nigeria

Research Hypotheses

The following null hypothesis will guide this research:

1. There is no significant association between socio-demographic variables (age, gender, marital status, and educational level) and mental health outcomes (anxiety and depression) among employees of the universities.
2. There is no significant association between socio-demographic variables (age, gender, marital status, and educational level) on the level of occupational stress among employees of the universities.
3. There is no significant correlation between occupational stress and mental health outcomes among employees of the universities

Materials and Methods

Research Design: The research design that was employed for this study is the descriptive survey research design.

Study Population: The population for this study was administrative and academic staff of selected universities in Ogun State.

Sample Size and Sampling Technique: The sample size for this study will be determined using Cochran's formula, which is appropriate for large populations and is widely applied in quantitative research to estimate sample sizes with a specified level of precision (Cochran, 1977). The formula is expressed as:

$$n = \frac{Z^2 pq}{e^2}$$

Where n is the sample size, Z is the Z-value at the desired confidence level (1.96 for 95%),p is the estimated proportion of the population (0.5),q=1−p (which is also 0.5), and e is the margin of error (0.05).Substituting into the formula:

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384$$

Hence, the sample size was 422 (384 plus 10% attrition rate of 38) university employees.

Sampling procedure: A multistage sampling technique was used:

First stage: Nine (3 public and 6 private) universities were selected in Ogun state, Nigeria were randomly selected based on the date of establishment and number of employees.

Second stage: At each university, lecturers and administrative staff are clustered according to their faculty/schools/units

Third stage: A number was assigned to each faculty and nine faculties are chosen at random from the cluster

Fourth stage: The researcher conveniently approached the employees in the different faculties.

Instrumentation: A questionnaire with the title Correlates of Mental Health Outcomes Questionnaire was the instrument used to gather the data. The instrument is a closed-ended multiple-choice survey with four sections was distributed (A-D). All sections, with the exception of section A, which contains the demographic information, will represent a different variable.

Section A: This section deals with the respondents' demographic information of the employees such as age, gender, cadre, job status, and years spent on the current job.

Section B: This section is termed the stressors. To acquire responses from the employees, a five-point Likert scale will be used. Consisting of Never True (1), Occasionally True (2), Often True (3), Usually True (4) and Most of the Time True (5). This section has a total of 15 items.
Section C: This section deals with the level of job stress. The statements concentrated on the indicators of job stress. The responses will be scored on a five-point Likert scale of Very High Level (5), High Level (4), Moderate level (3), Low Level (2), and Very Low Level (1). This section has a total of 12 items.
Section D: This section contains items that measure the mental health outcomes of the employees of the selected private universities in Ogun State, Nigeria. This study adopted the 4DSQ questionnaire developed by Terluin et al, (2016). The 4DSQ comprises four symptom scales: distress (16 items), depression (6 items), anxiety (12 items), and somatization (16 items). Depression and anxiety sub-scale were only be used in this study (18 items in all). The items were answered on a 5-point frequency scale from "no" to "very often or constantly".
Method of Data Analysis: For the analysis of the research questions, descriptive statistics such as frequency, means, and standard deviation were employed. Using IBM SPSS 23 version software, inferential statistics such as multiple regressions will be used at a 0.05 level of significance for the hypothesis. With the help of multiple regression analysis, researchers evaluated the strength of the relationship between the dependent variable and independent variables as well as the contribution of each independent variable to the relationship.

Results

Table 1: Cross-tabulation table showing the socio-demographic correlates of mental health outcomes

Socio-demographic variables		Frequency	%	Depression		Anxiety	
				χ2	Sig	χ2	Sig
Age	21-30yrs	79	18.7				
	31-40yrs	174	41.2	156.091	.000**	163.768	.000**
	41-50 above	115	27.3				
	51yrs above	54	12.8				
Gender	Male	186	44.1	75.543	.000**	90.073	.000**
	Female	236	55.9				
Years of experience	1-5yrs	31	7.3				
	6-10yrs	83	19.7				
	11-15yrs	123	29.1	59.433	.000**	71.793	.000**
	16-20yrs	111	26.3				
	21yrs above	74	17.5				
Job Status	Academic	286	67.8	21.208	.311	18.881	.286
	Non-academic	136	32.2				

Table 1 shows that the chi-square value obtained for age is ($x^2 = 156.091$, p = .000); gender ($x^2 = 75.543$, p = .000); and years of experience ($x^2 = 59.433$, p = .000) at the significant levels of less than 0.05 for the three variables respectively. Since these p-values were less than 0.05 values, it could be said that age, gender, and years of experience are good correlates of mental health outcomes among university employees in relation to depression. However, for job status, the chi-square values obtained was 21.208 at insignificant levels of .311. It could be said that job status is not good correlates of depression among the employees.
For the anxiety, age ($x^2 = 163.768$, p = .000); gender ($x^2 = 90.073$, p = .000); and years of experience ($x^2 = 71.793$, p = .000) were found to be significant at less than 0.05 levels while job status ($x^2 = 18.881$, p = .286) was found insignificant. Therefore, this study established that there is a significant association between socio-demographic variables (age, gender, and years of experience) and mental health outcomes among university employees.

Table 2: Cross-tabulation table showing the socio-demographic correlates of level of occupational stress

Socio-demographic variables		Frequency	%	Stress	
				χ2	Sig
Age	21-30yrs	79	18.7		
	31-40yrs	174	41.2	91.786	.000**
	41-50 above	115	27.3		
	51yrs above	54	12.8		
Gender	Male	186	44.1	58.544	.000**
	Female	236	55.9		
Years of experience	1-5yrs	31	7.3		

	6-10yrs	83	19.7		
	11-15yrs	123	29.1	80.132	.000**
	16-20yrs	111	26.3		
	21yrs above	74	17.5		
Job Status	Academic	286	67.8	11.422	.091
	Non-academic	136	32.2		

The results presented in Table 2 revealed a significant association between age ($x^2 = 91.786$, $p = .000$), gender ($x^2 = 58.544$, $p = .000$), and years of experience ($x^2 = 80.132$, $p = .000$) on the level of occupational stress among university employees. However, job status ($x^2 = 11.422$, $p = .091$) was found not to be associated with level of occupational stress among employees of the universities.

Table 3: Correlation between occupational stress and mental health outcomes

		Depression	Anxiety
	Pearson Correlation	.481**	.659**
Job stress	Sig. (2-tailed)	.000	.000
	N	422	422

The results presented in Table 3 showed the significant correlation between occupational stress and mental health outcomes among employees of the universities. It was revealed significant and positive relationship job stress and depression ($r = .481$, $p = .000 < .05$), and anxiety ($r = .659$, $p = .000 < .05$). Additionally, the study through regression analysis showed that depression and anxiety contributed 48.1% and 65.9% respectively to the respondent's level of occupational stress. Therefore, the earlier null hypothesis, which stated "There is no significant correlation between occupational stress and mental health outcomes among employees of the universities", was rejected.

Discussion of Findings

The result of this study revealed that age, gender, and years of experience are good correlates of mental health outcomes among employees of private universities in relation to depression and anxiety. This result is in tandem with the findings of Reile and Sisask (2021) on socio-economic and demographic patterns of mental health complaints among the employed adults in Estonia. They found out that demographic characteristics, especially age, gender and marital/cohabitation status were highly relevant in terms of mental health outcome.

The results revealed a significant association between age, gender and years of experience on the level of occupational stress among employees of private universities. This result is similar to the findings of Akunne (2021) that academics' professional stress and age together accounted for 72.0% and 6.2%, respectively of their mental health. Likewise, there is a strong correlation between professors' age and job stress and their mental health. Occupational stress is linked to various mental health disorders and illnesses thereby contributing to the global burden of disease based on age, gender, job type and marital status (Richford, 2021).

The results showed the significant and positive relationship job stress, depression and anxiety. This is supported by the researches of Akerstrom (2021), Moreno-Fortes (2020) who have demonstrated that the combination of two or more stressors can lead to elevated levels of psychological discomfort in workers. The effect of occupational stress on mental health outcomes like anxiety and depression has indicated that workers at private institutions who encounter elevated levels of work-related stress are more susceptible to mental health issues (Olanrewaju, 2020). These results are consistent with those of Ajenifuja (2022), who found a substantial correlation between workplace stress and healthcare professionals mental health.

Conclusions

Occupational stress among employees is an important concern from the perspective of employee productivity in the workplace. It is difficult to explain the factors affecting an employee's mental health directly or indirectly. This study established the existence of depression and anxiety among the universities employees, as there are significant and positive relationships between job stress, depression and anxiety. The results obtained clearly show that workers' hardiness needs to be strengthened and that effective measures are required to prevent occupational stress.

Based on the findings of this study, the following recommendations are made:

i. Employees should be provided with genuine control over their work and an appropriate degree of self-management of workload. Roles should be clearly demarcated with defined responsibilities and expectations in order to avoid stress.
ii. The university environment should be strengthened, empowered in a significant way and be made to deal with job related factors effectively. Thus, training should be structured to meet the personality and coping needs of each

individual, making sure that the contemporary challenges of the organization is confronted while work stress is reduced to the barest minimum.

iii. University should always look for ways to improve the occupational wellbeing of their employees. Unfortunately, most employees today are continuously dealing with high job demands and stress-induced tasks in other to meet the organizations' goals.

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