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Occupational stress among some Nigerian graduate employees: The impact of work experience and education

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Abstract: This study investigated perceived occupational stress among some graduate employees in Nigeria as consequence of work experience and educational qualification. The study uses the positivist explanatory cross-sectional (survey) research design, and a structured and validated questionnaire to systematically sample opinions of 1,532 male and female graduate employees across the various sectors of the nation’s economy. Moreover, hypotheses were stated and tested using T-test of Independent Groups and One-way Analysis of Variance. The results of the statistical analysis showed that graduate employees with more work experience expressed a significant higher level of occupational stress than their counterparts with less work experience (t = 4.43, df (1530) p <.01). The results also showed that there is a significant interaction effect of Bachelor’s Degree (B.Sc), Higher National Diploma (HND), and Postgraduate on occupational stress F (2, 1529) = 3.26; P < .05. This is evident in the mean scores of participants across the three groups of educational qualification—B.Sc

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PUBLIC INTEREST STATEMENT

Stress is the ubiquitous outcome of contemporary lives and a common result of modern-day activities. It is also a constituent of modern organizations that would remain a constant phenomenon in the workplace. Thus, excessive occupational stress has been considered an inimical part of work environment, and is often associated with psychological and physical health. Occupational stress produces employee absenteeism, intention to quit, interpersonal difficulties, and poor performance in an organization. Interestingly, different studies have focussed on the advanced countries and scanty research works in the developing world especially in Sub-Saharan Africa. Therefore, this research is conducted in the context of an African country, precisely Nigeria to provide empirical evidence with regards to occupational stress and demographic characteristic relationship Literature. It is on this premise that the paper sought to investigate the perceived occupational stress among some graduate employees as a consequence of work experience and educational qualification.
(\(\bar{X} = 24.53\)); HND (\(\bar{X} = 23.72\)); and Postgraduate (\(\bar{X} = 24.66\)). The study recommended that human resource managers should constantly organise stress management programmes as some strategies to reduce the amount of stress in the workforce.

**Subjects:** Psychological Science; Human Resource Management; Organizational Studies

**Keywords:** educational qualification; graduate employee; occupational stress; work experience; Nigeria

1. Introduction

Typically, stress is the ubiquitous outcome of contemporary lives and a common result of modern-day activities (Masoom & Hoque, 2018). It is also a constituent of modern organizations that would remain a constant phenomenon in the workplace (Behestifir & Nazarian, 2013). The experience of workplace stress has been subjected to a large number of researches, and interests in the topic continue to gain momentum. Occupational stress is currently one of the most costly occupational health issues (Akintayo, 2012), which poses a major challenge to 21st century organizations (Donaldson-Feilder et al., 2011), and now becoming the global issue that is affecting all countries, all categories of employees and societies (Mohajan, 2012). Daily demands in the workplace are a constant challenge to the assimilative and adaptive capabilities of employees. Hence, an employee, who is overtasked and unable to cope with environmental demands, would develop stress reactions or emotional exhaustion, which in turn, will adversely affect the employee’s job performance (Bamber, 2011).

Occupational stress is defined as hazardous physical and emotional responses that occur as a result of situations where job demands exceed worker's capabilities (Mohajan, 2012). It refers to the employee’s response when facing work demands and pressures that are not matched to their resources, needs, abilities and knowledge, which overcome their ability to cope or manage (Khudaniya & Kaji, 2014). Ornek and Sevim (2018) opine that occupational stress occurs when the job demands and responsibilities are not in sync with workers’ abilities or when the time allocated for the work is insufficient. Hence, they cause many negative organizational outcomes and unhealthy behaviours.

However, excessive occupational stress has been considered an inimical part of work environment, and is often associated with psychological and physical health (Z. Wang et al., 2017). Studies have demonstrated that occupational stress was a risk factor for burnout, poor employee well-being and cardiovascular disorders (Gosselin et al., 2016; Y Wang et al., 2015). Occupational stress produces employee absenteeism, intention to quit, interpersonal difficulties, and poor performance in an organization (Ashton, 2017). It is also a common cause of job satisfaction and positively correlates with employee burnout and voluntary turnover intention and negatively correlates with employee productivity and absenteeism. Kaur (2011) posits that occupational stress reduces quality of life and the overall mental and physical wellbeing of employees, and leads to unpleasant emotions such as depression and anxiety which impair employee’s ability to function at work or cope with daily life (Borrelli et al., 2014; Rathee, 2014).

In addition, most of the relevant research (Ashton, 2017; Hwang et al., 2013; Lambert et al., 2016) indicate that the vast majority of employees experience high levels of occupational stress, which can generate negative impacts on both the employee and the organization. Other studies on the relationship of demographic variables such as (gender, age, marital status, occupation etc.) have also been documented in the literature (Jamal, 2011; Mansour & Mohanna, 2017; Melinda et al., 2010). Interestingly, these studies have focussed on the advanced countries and scanty research works in the developing world especially in Sub-Saharan Africa. Therefore, this research is conducted in the context of an African country, precisely Nigeria to provide empirical evidence.
with regards to occupational stress and demographic characteristic relationship literature. It is on this premise that the paper sought to investigate the perceived occupational stress among some graduate employees as a consequence of work experience and educational qualification.

1.1. Objectives
- To ascertain the effect of work experience on occupational stress among some Graduate employees in Nigeria.
- To investigate the effect of educational qualification on occupational stress among some graduate employees in Nigeria.

2. Review of related literature
Stress at work is adjudged as one of the major psychosocial risks at work. It is a pattern of negative physiological states and psychological responses occurring in situations where individuals perceive threats to their well-being, which they may be unable to meet (Mcilveen & Gross, 1997; Czuba, et al., 2019). Stress is also defined as a psychological concept that can affect health; well-being and job performance in negative dimensions (Casey, 2013). On the other hand, occupational stress refers to a condition where in job-related factors interact with the worker to change his psychological or physiological condition that worker is forced to deviate from normal functioning (Ozioko et al., 2014). By extension, the level of perceived occupational stress depends on a myriad of factors. Thus, socio-demographic characteristics of employees have gradually become vital factors in the assessment and management of occupational stress (European Agency for Safety and Health at Work, 2012; Leka & Jain, 2010). In this section, the literature of the demographic characteristics that influence occupational stress has been reviewed.

2.1. Work experience, educational qualification and occupational stress
The demographic characteristics and their influence on occupational stress have been studied by various researchers in the past. Laal and Aliramaie (2010) found significant differences between gender and job experience with negative response to occupational stress, viz., the males with shorter job experience of less than 5 years were more disturbed by stress. Jeyaraj (2013) found an association between the years of experience and the level of stress of teachers. The study indicated that out of 91 respondents, who had years of experience above 15 years 8.6% had low-stress level, 19.5% had a moderate stress level and 21.1% had high-stress level. The result revealed that majority of employees who had above 15 years of experience had moderately to high-stress level. Thus, stress-causing dimensions do not differ severely for employees having less than 20 years of work experience and those greater than 20 years of work experience.

Mutawa, Jdaitawi, Saleh and Awad (2014) found no significant difference on lecturer's level of strain on the basis of experience. Kumasey et al. (2014) found that the number of years the individual has worked did not determine significant difference in the experience of stress but positive and negative job experiences have similar influences on men's and women's mental health. Emento (2015) surveyed 113 bank secretaries' perceived occupational stress (and coping) with a point rating scale of 30-items that has reliability coefficient of 0.73, and found that administrative and clerical functions are the root causes of stress. She also indicates that there are no significant differences of perceived stress in relation with gender, work experience and marital status.

Affum-Osei and Azunu (2015) examined the relationship between occupational stress and demographic variables (gender, age, educational qualification, experience and marital status) among 206 employees randomly selected from 10 branches of a commercial bank in Ghana. A descriptive correlation survey was used in the study. The results found that majority of the employees were moderately and highly stressed with female workers recording the highest level of occupational stress compared to their male counterparts. The study further indicated that, there is evidence of significant relationship between occupational stress and demographic variables (gender, age, educational qualification, work experience and marital status).
Sharma and Kaur (2013) investigated the difference in the perceptions of insurance company employees according to their demographic profiles which include age, income, length of service and hierarchical level. Using ANOVA statistical technique to conduct the analysis, the results revealed that the respondents belonging to the age group of above 29 years experienced more stress than other age groups and the respondents who earned monthly income above 50,000 experienced more stress compared to others. Further, the respondents with more than 5 years length of service and higher hierarchical level predicted high level of stress as compared to other groups.

Ramya and Mallika (2013) investigated the impact of demographic variables on occupational stress among working women in Chidambaram and found that the occupational stress was medium and low and the demographic variables such as income and work experience significantly influenced the occupational stress of employees. Shafaghat et al. (2018) examined factors affecting occupational stress and strategies for coping with it among 190 nurses at Shahid Rajaee Hospital. Using Pearson correlation coefficient tests, Mann-Whitney tests, and t-tests, the result found that occupational stress was rated as moderate among the studied nurses. Also, significant positive correlations were found between occupational stress level and less effective coping method, occupational stress level and work experience level, and ineffective coping methods and age. Moreover, a significant difference was seen between men and women in terms of emotion-focused coping.

2.2. Educational qualification and occupational stress
A study conducted Hunnur and Bagali (2014) which investigated whether the various dimensions causing stress differ significantly on the basis of education qualification, revealed that the stress-causing dimensions do not differ drastically for the graduates and undergraduates. Affum-Osei et al. (2014) in their study revealed that employees with lower qualification experience high level of occupational stress and higher education employees are able to handle occupational stress and burnout. Baytar (2010) found no statistical difference between stress factors and different education levels. Al-Kahtani and Saad (2013) investigated the effect of some certain demographic characteristics such as position in the current job, age, experience and marital status on job burnout among selected banking employees in Saudi Arabia. Job burnout inventory was used in this research, from which result revealed that subordinate staff, married and high experienced group of employees reflected higher degree of job burnout. In addition, the younger and older bank employees were detected to differ substantially in terms of job burnout.

Sharma (2016) examined the effect of job among 415 Indian soldiers and analyzed the differences in opinions of soldiers according to six demographic variables, namely designation, income, qualification, age, length of service and marital status. ANOVA and post-hoc tests were applied to analyze the data. The findings revealed significant differences on the basis of designation, age, service tenure and marital status mainly with regard to three occupational stressors, namely, ineffective leadership style, lack of control at work and role ambiguity. The result further revealed that income and educational qualification were the only demographic variables showing significant and insignificant differences, respectively for all occupational stressors. A comparison of mean scores of demographic characteristics revealed that single soldiers belonging to lower ranks and younger age group (20–30 years) with service tenure of less than 10 years suffer highest from occupational stress in the army. Additionally, inadequate training and workload were more stress creating factors for higher ranks and soldiers with higher length of service, in contrast to other groups.

Soni et al. (2015) examined the relationship of a set of demographic variables (age, qualification, experience, position, income and marital status) with occupational stress (Organizational Role stress & Burnout) among Animal Husbandry Personnel, which include 236 Veterinarians and 146 para veterinarians of Animal Husbandry Department. Using multiple regression and path analysis statistical treatment to establish the various possibilities of cause and effect relationship; the results revealed that length of service and age had negatively significant relationship with RS and PI, age had negatively significant relationship with RIN. Similarly, length of service had negatively significant relationship with REC. Educational qualification had positively significant
relationship with RE and monthly income had negatively significant relationship with P1. The result further revealed that majority of veterinarians and Para-veterinarians were having low level of exhaustion and cynicism. All six demographic variables failed to establish significant relationship with three sub-scales of burnout viz., Exhaustion, cynicism and personal efficacy.

Rani and Singh (2012) investigated the relationship between occupational stress and some of the demographic variables. Occupational Stress Index by A.K Shrivasta was used to collect data, and data was analyzed by using statistical techniques such as mean, SD and t-value. The results found that the teachers have moderate level of occupational stress. Male and female teachers did not differ in their levels of occupational stress. The teachers working in government and private schools were not found to differ in their level of occupational stress. Considering the above empirical literature on the relationship between work experience, educational qualification and occupational stress, we offer the following propositions.

2.3. Statement of hypotheses

Hypothesis 1

H0: Work experience has no significant effect on occupational stress. H1: Work experience has a significant effect on occupational stress.

Hypothesis 2

H0: Educational qualification has no significant effect on occupational stress. H1: Educational qualification has a significant effect on occupational stress.

3. Research methodology

3.1. Research design, sample and procedure

The study adopted a positivist explanatory cross-sectional (survey) research design. The explanatory cross-sectional (survey) research was considered appropriate for the study because the research used the positivist approach by means of quantitative data generation, and hypotheses testing (Bhattacherjee, 2012). The chosen research design was also considered appropriate in the study, because the study cut-across the private and public sectors of the national economy. Thus, incorporated diverse industries.

The stratify type of probability (Two-stage North Carolina Centre for Public Health Preparedness’, 2013 sampling scheme) technique was adopted along with The Research Advisors’ (2006) Sample Size Calculation Table, and used in calculating the appropriate sample size of the study. According to the Federal Ministry of Women Affairs and Social Development (2008), there were a total number of 40,567,978 male and female employees across industries in Nigeria as at the year 2007. In applying the stratify sampling method as recommended by the North Carolina Centre for Public Health Preparedness, 10% of 40,567,978 was calculated at the first stage, which reduced the number to 4,056,797. Again, at the second stage, 10% of 4,056,797 was calculated. Consequently, the result further reduced the number to 405,679. Nevertheless, at this point, the researchers subjected the derived figure of 405,679 to the recommendation of the Research Advisors’ (2006), which approves a sample size of 1,532 (at 95% level of confidence and 2.5% margin of error) out of an approximate population of 500,000 for a national survey. Hence, the researchers were 95% confident of the population sampled being a true representation of the study’s targeted population. Thus, a total of 1,532 male and female graduate employees formed the sample size of the study.

In addition, the convenience and purposive types of non-probability sampling technique were employed in selecting participants for the study. Firstly, the convenience sampling technique was
applied in selecting three most suitable states (Oyo, Osun and Lagos States) out of the 36 states in Nigeria, as the sites of the field work. The rationale for selecting the three states is that each of them houses one or the other of the renowned public and private universities (University of Ibadan, Obafemi Awolowo University, and the Pan-Atlantic University) where the study sample were offered part-time postgraduate admissions of MBA programmes as working-class postgraduate students with a minimum of three-year employment experience. Another reason for adopting the convenience sampling technique was because the field work became easier when the participants were met in groups at conducive places such as in the lecture-rooms and relaxation centres within the university premises. Furthermore, since the study was designed only for the graduate employees, the purposive sampling technique was also introduced and applied, to ensure that participants in the study were employed during the period of the field work, and that they were graduates of universities and polytechnics.

The sample comprised of 916 (60%) male and 616 (40%) female graduate employees from 19 (private and public) sectors of the Nigerian economy. Among the participants, 202 (13.2%) were graduate employees from the educational sector, 38 (2.5%) from the research institutes, 51 (3.3%) from the transportation sector, 291 (19%) from the finance and insurance sector, 83 (5.4%) from the fast moving and consumable goods (FMCG) Industry, 21 (1.4%) from the commercial sector, 70 (4.6%) from the healthcare sector, 8 (0.5%) from the aviation sector, 77 (5.0%) from the agricultural sector, 57 (3.7%) from the information. All participants were Nigerians English speakers. In terms of educational qualifications, 68% of the participants were holders of Bachelor degrees, 23.4% were holders of Higher National Diploma Certificates while the remaining 8.7% were in possession of a Postgraduate Degree Certificate.

In addition, statistics indicate that 29.2% among the participants in the study had less than 5 years of work experience. Twenty-nine percent had between 5 years and 9 years of work experience, 16% had between 10 years and 14 years, 9.5% had between 15 years and 19 years, 6.3% had between 20 years and 24 years while the remaining 9.3% had between 25 years and 29 years of work experience. Data were collected by means of paper-pencil inventories (structured validated questionnaires), which were distributed to employees in the large lecture auditoriums during their weekend (Saturdays) part-time professional postgraduate programmes, in the three renowned public and private universities (University of Ibadan, Obafemi Awolowo University and the Pan-Atlantic University), situated in Oyo, Osun and Lagos states of Nigeria.

3.2. Ethical consideration
The participants’ voluntary participation in the study was sought through a letter of consent, signed by each of the participants. The participants were informed about the importance of the study as the findings from the study may positively influence the government policy helping in improving their conditions of employment and service, respectively. Moreover, assurance was given to the participants in respect of confidentiality of all information supplied. Furthermore, the participants were instructed not to indicate any means of identification such as name, identity number or organisational affiliation. With utmost sense of sincerity, information concerning the study and its outcomes was accurately submitted to the appropriate institutions. Thus, it was ensured that no instance of misleading actions were demonstrated in the course of the study. The researchers also ensured that the study was conducted in a conducive environment such that would not expose the participants to any physical or psychological hazard. The Research Ethics Committee of University of Fort Hare furthermore granted approval for ethical clearance of the study (Certificate reference number: MJO071SAD01).

3.3. Measuring instruments
The participants were administered a self-report questionnaire, which consisted of a biographical and occupational data questionnaire plus one validated scale measuring occupational stress. The questionnaire was divided into two distinct sections, labelled section A and B.
Section A The section tapped the biographical and occupational data of participants concerning the following variables: educational qualification and work experience. There were no particular scales used in this section. The participants were only presented the biographical and occupational variables mentioned above, and were asked to indicate their corresponding statuses. Section B.

3.4. Occupational stress

The section consisted of a 9-item scale of job stress that was developed and validated by Jamal and Baba (1992), with a 5-point Likert-type response format ranging from 1/(Strongly disagree) to 5/(Strongly agree). The authors reported a Cronbach Alpha coefficient of 0.83 for the scale. However, in the course of the pilot study, the outcome of the factor analysis showed that among the nine items in the aforementioned scale of job stress, two items were statistically identified inconsistent in its relationship with the others ($r < 0.30$). Hence, the two items were interpreted in the pilot study as not valid measures of occupational stress, particularly, in the contextual situation of Nigeria. Both items were consequently deleted from the pilot data analysis while the remaining seven items were retained in the main study’s questionnaire. The researcher therefore reported from the pilot study a Cronbach Alpha coefficient score of 0.81 for the scale of job stress.

3.5. Statistical analysis of data

The data generated from 1,532 screened questionnaires were analysed based on the hypotheses stated, using version 20 of the Statistical Package for the Social Sciences (SPSS). Hypothesis 1 was analysed, using T-test Statistics of Independent Groups. Hypothesis 2 was analysed using Oneway Analysis of Variance (Oneway ANOVA), while the percentage, mean, standard deviation and the frequency of the biographical and occupational data were also determined by the descriptive statistics.

4. Research results and discussions

Hypothesis 1, which states the following:

H0: Work experience has no significant effect on occupational stress.

H1: Work experience has a significant effect on occupational stress. The hypothesis was analysed using T-test Statistics of Independent Groups. The results of the analysis are therefore presented in Table 1 below.

The results in Table 1 show that graduate employees with more work experience expressed a significant higher level of occupational stress than their counterparts with less work experience ($t = 4.43$, df (1530) $p < .01$). The results imply that work experience has a significant impact on occupational stress among graduate employees in Nigeria. Based on these results hypothesis 1 H0, which states that work experience has no significant effect on occupational stress, was rejected. While hypothesis 1 H1, which states that work experience has a significant effect on occupational, was accepted.

Hypothesis 2, which states the following:

H0: Educational qualification has no significant effect on occupational stress.

H1: Educational qualification has a significant effect on occupational stress. The hypothesis was analysed using Oneway Analysis of Variance (Oneway ANOVA)

The results in Table 2 show that there is a significant interaction effect of B.Sc, HND, and Postgraduate on occupational stress $F (2, 1529) = 3.26$; $P < .05$. The results suggest that educational qualification has a significant impact on occupational stress among graduate employees in Nigeria. This is evident in the mean $\bar{X}$ scores of participants across the three groups of educational qualification—B.Sc ($\bar{X} = 24.53$); HND ($\bar{X} = 23.72$); and Postgraduate ($\bar{X} = 24.66$). Each of the three categories of marital status scored moderately high on the scale of occupational stress. Based on these results hypothesis 2 H0, which
Table 1. A summary table of t-test statistics of independent groups showing the mean (x) difference of work experience (more experienced and less experienced) on occupational stress

| Work Experience                  | N   | (X) | SD  | df  | t    | Sig. |
|----------------------------------|-----|-----|-----|-----|------|------|
| Occupational stress              |     |     |     |     |      |      |
| More Experienced (10 year and above) | 639 | 25.07| 5.29| 1530| 4.43 | .000 |
| Less Experienced (less than 10 years) | 893 | 23.84| 5.43|    |      |      |
states that educational qualification has no significant effect on occupational stress, was rejected. While hypothesis 2 H1, which states that educational qualification has a significant effect on occupational stress, was accepted.

The results established the hypothesized effect of work experience and educational qualification on occupational stress among graduate employees in Nigeria. Specifically, hypothesis 1, which states that work experience has a significant effect on occupational stress, was confirmed. In other words, participants’ job experience is a significant determinant of their exposure to occupational stress. Again, it was confirmed in the study that the higher the number of years spent at work, the greater the level of occupational stress being faced by graduate employees. This explains that though, occupational stress is commonly experienced by graduate employees in Nigeria, yet it is more experienced by graduate employees with a higher level of work experience than it was experienced by their counterparts with lower levels of work experience.

The most obvious reason for the disparity observed between the two groups of graduate employees as regards their experience of occupational stress is the difference in roles and expectations of their job positions. For instance, the more experienced graduate employees probably occupy the senior job positions, which are mostly supervisory and managerial positions, and it required the job incumbents or position holders to see to the needs of subordinates and colleagues, and help in meeting their needs beyond the expected. Engaging in extra-role behaviours, perhaps, expose the highly experienced graduate employees to a higher level of job stress.

The present findings are supported by the findings of Sharma and Kaur (2013) study, which investigated the difference in the perception of stress among insurance companies’ employees according to their demographic profiles which include length of service and hierarchical level. Using ANOVA statistical technique to conduct the analysis, the results revealed that the respondents with more than 5 years length of service and higher hierarchical level reported a higher level of stress as compared to those with less than 5 years length of service.

Similarly, Ramya and Mallika (2013) investigated the impact of demographic variables on occupational stress among working women in Chidambaram and found that work experience significantly influenced occupational stress of the said employees. Shafagh et al. (2018) also examined factors affecting occupational stress and strategies for coping with it among 190 nurses at Shahid Rajaee Hospital, using Pearson correlation coefficient tests. The study found a significant relationship between occupational stress and work experience. Moreover, Jeyaraj (2013) found an association between the years of experience and the level of stress of teachers. The study indicated that out of 91 respondents, who had years of experience above 15 years 8.6% had low stress level, 19.5% had a moderate stress level and 21.1% had high-stress level. The result revealed that majority of employees who had above 15 years of experience had moderately to high-stress level. However, in contrast to the results of the present study, Mutawa, Jdaïtwï, Saleh and Awad (2014) found no significant difference on lecturer’s level of strain on the basis of experience.

Kumasey et al. (2014) found that the number of years the individual has worked did not determine significant difference in the experience of stress but positive and negative job experiences have similar influences on men’s and women’s mental health. Ementa (2015) surveyed 113 bank secretaries’
perceived occupational stress (and coping) with a point rating scale of 30-items that has reliability coefficient of 0.73, and found that administrative and clerical functions are the root causes of stress. She also indicates that there are no significant differences of perceived stress in relation with gender, work experience and marital status.

Furthermore, hypothesis 2, which state that educational qualification has a significant effect on occupational stress was confirmed. In other words, a significant interaction effect of B.Sc, HND, and Postgraduate was observed on occupational stress among graduate employees in Nigeria. This simply explains that educational qualification of graduate employees determines how much they work-related stress. For instance, the scores of the study's participants on occupational stress scale show that B.Sc and Postgraduate holders expressed higher levels of occupational stress, more than HND holders. The possible reason for these results could be the influence of variations or differences in the work load and practical experience in the educational curricula of the different degrees. For instance, the HND holders had experienced a year mandatory internship programme before their graduation, while the case of B. Sc, there is no mandatory internship requirement for graduation. As such the one-year mandatory internship programme probably, had positively moderated the perception of HND graduate employees towards work stress. Though, several studies have revealed that less educationally qualified employees experience higher levels of occupational stress than the highly educationally qualified employees.

However, a study conducted by Hunnur and Bagali (2014) which investigated whether the various dimensions causing stress differ significantly on the basis of education qualification, revealed that the stress-causing dimensions do not differ drastically for the graduates and undergraduates. Moreover, Baytar (2010) found no statistical difference between stress factors and different education levels. Nevertheless, Affum-Osei et al. (2014) in their study revealed that employees with lower qualification experience high level of occupational stress and higher education employees are able to handle occupational stress and burnout.

5. Conclusion and recommendations
This study makes the following conclusions:

(1) There is a significant effect of work experience on occupational stress.
(2) Graduate employees with a higher level of work experience expressed significantly higher level of occupational stress, more than their less experienced counterparts.
(3) There is a significant effect of educational qualification on occupational stress.
(4) The B.Sc and Postgraduate employees expressed a higher level of occupational stress than the HND employees.

In view of the above discussion and conclusions, the researchers make the following practical recommendations:

- That management of corporate organisations and employers of labour including the government at all levels, most especially in Nigeria, should put in place as a matter of necessity, some strategic measures to ensure that the levels of work stress which employees are exposed are drastically minimised.
- That the educational curriculum of tertiary institutions in Nigeria, especially, the universities, should be redesigned to incorporate a year mandatory internship programme, as part of the requirements for the award of university degrees. This will afford the university graduates the privilege to have a taste and experience of the challenges in the world of work just like their polytechnic counterparts, and be able to manage the stressful situations that are inherently designed with their job roles and responsibilities.
- That the human resource management of organisations should constantly organise stress management programmes as a strategy to reduce the amount of stress in the workforce. It could be informing of Employee Assistance Programmes (EAPs), which include in-house
counselling programmes on managing stress. Evaluative research has been conducted on EAPs that teach individual stress control and inoculation techniques such as relaxation, biofeedback, and cognitive restructuring.

- That employers should provide wellness or physical fitness programmes to promote occupational health. By enhancing physical and emotional well-being, employees may become less vulnerable to the effects of stress.

- That human resource managers and supervisors should improve the person-job fit, because work stress commonly arises when employees are in jobs they dislike or jobs for which they ill-suited. Hence, a mismatch between an employee's interests or skills and job requirements can be very stressful. By maximizing the person-job fit through the careful screening, selection, and placement of employees, organisations can alleviate a great deal of stress.

6. Limitations of the study and suggestions for future research

The first noticeable shortcoming of this research relates to bias in the approach of data collection. The research only adopted the quantitative method, which limited the opinions of research respondents to the response options provided to statements in the questionnaire. This study therefore, suggests that future studies should consider adopting more than one method of data collection.

The second acknowledged limitation of this study is the fact that the study was designed only to explore the effect of demographic and occupational variables on occupational stress, and did not consider the impact of situational and psychological variables. Moreover, the study focussed only the graduate employees in Nigeria, and neglected the other categories of employees who are not graduates. Because of the above-mentioned limitations, it is therefore, suggested that future research should test beyond the effect of demographic and occupational variables, but includes psychological and situational variables, and widen the scope of participation to involve all categories of employees regardless of their educational qualifications.

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Authors’ contributions
The first author was the PhD researcher who designed, developed and implemented the research blueprint while the second and third authors are research colleagues who assisted and contributed in the areas of data collection and analysis.

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References
Affum-Osei, E., Agyekum, B., & Addo, Y. V. J. (2014). Occupational stress and job performance in small and medium scale enterprises. International Journal of Economics, Commerce and Management, 2(11), 1–17.
Affum-Osei, E., & Azunu, C. (2013). Relationship between occupational stress and demographic variables: A study of employees in a commercial bank in Ghana. British Journal of Applied Science & Technology, 12(2), 1–9.
Akintayo, D. I. (2012). Occupational stress, psychological well-being and workers’ behaviour in manufacturing industries in South-West Nigeria. Research Journal in Organizational Psychology and Educational Studies, 1, 289–294.
Al-Kahtani, N. S., & Saad, N. (2013). Job burnout as a function of demographic variables: What do Saudi Arabia banking employees reflect? Far East Journal of Psychology and Business, 12(2), 12-25.https://ideas.repec.org/a/fej/articl/v12cy2013i2p12-25.html
Ashton, A. S. (2017). How human resources management best practice influence employee satisfaction and job retention in the Thai hotel industry. Journal of Human Resources in Hospitality & Tourism, 1–25.
Bamber, M. R. (2011). Overcoming your workplace stress: A CBT-based self-help guide. Routledge.
Baytar, O. (2010). İş yaşamında stresin ve goren performansı üzerinde etkileri. Marmara Üniversitesi, Sosyal Bilimler Enstitüsü Yayınlanmamış Yüksek Lisans Tezı.
Beheštifor, M., & Nazarian, R. (2013). Role of occupational stress in organizations. Interdisciplinary Journal of Contemporary Research in Business, 9, 648–657.
Bhattacherjee, A. (2012). Social Science Research: Principles, Methods, And Practices (2nd ed). Text books Collection, 3. https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks
Borrelli, I., Benevene, P., Fiorilli, C., D’Amelio, F., & Pozzi, G. (2014). Working conditions and mental health in teachers: A preliminary study. Occupational Medicine, 64(7), 530. https://doi.org/10.1093/occmed/kqu108

Casey, L. (2013). Stress and wellbeing in Australia survey 2013. Australian Psychological Society. http://www.psychology.org.au

Czuba, K. J., Kayes, N. M., & McPherson, K. M. (2019). Support workers’ experiences of work stress in long-term care settings: a qualitative study, International Journal of Qualitative Studies on Health and Well-being, 14(1), 1622356. DOI: 10.1080/17482631.2019.1622356

Donaldson-Feilder, E., Yarker, J., & Lewis, R. (2011). Preventing stress in organizations: How to develop positive managers. John Wiley & Sons Ltd.

Ementa, C. (2015). Secretaries’ perceived strategies for coping with occupational stress in banks in Anambra state. African Review Research, 9(3), 88. https://doi.org/10.4341/affrev.v9i3.8

European Agency for Safety and Health at Work. (2012). Management of psychosocial risks at work: An analysis of the findings of the European survey of enterprises on new and emerging risks (ECSENIR). European Union.

Gosselin, E., Bourgault, P., & Laviole, S. (2016). Association between job strain, mental health and empathy among intensive care nurses. Nursing in Critical Care, 21(3), 137–145. https://doi.org/10.1111/nicc.12064

Hunnr, S.R., & Bogol, M. M. (2014). Workplace stress – Causes of Work Place Stress in Police Department: A Proposal for Stress Free Workplace. Sub-Inspectors in Police Department. International Journal of Business and Administration Research, 4(3), 16. doi:10.9790/487X

Hwang, J., Hyun, S. S., & Park, J. (2013). Segmentation of hotel employees by occupational stress and differences in demographic characteristics. Asia Pacific Journal of Tourism Research, 18(3), 241–261. https://doi.org/10.1080/10941665.2011.647040

Jamal, M. (2011). Job stress, job performance and organizational commitment in a multinational company: An empirical study in two countries. International Journal of Business and Social Science, 2(20), 20–29.

Jamal, M., & Baba, V. V. (1993). Shiftwork and department-type related to job stress, work attitudes and behavioral intentions: A study of nurses. Journal of Organizational Behavior, 13, 449–46. DOI: 10.1002/(ISSN)1099-1379

Jeyaraj, S. S. (2013). Occupational stress among the teachers of the higher secondary schools in Mambidi district, Tamil Nadu. IOSR Journal of Business and Management, 4(5), 63–76. https://doi.org/10.9790/487X-0756176

Kaur, S. (2011). Comparative study of occupational stress among teachers of private and govt. schools in relation to their age, gender and teaching experience. International Journal of Educational Planning & Administration, 1(2), 51–60.

Khaduvarya, K. S., & Kaji, S. R. (2014). Occupational stress, job satisfaction & mental health among employees of government and non-government sectors. International Journal Indian Psychology, 2(1), 50–58.

Kumasey, S. A., Delle, E., & Ofesi, B. S. (2014). Occupational stress and organizational commitment: Does sex and managerial status matter? International Journal of Business and Social Research (IJBSSR), 4, 51.

Laal, M., & Aliramaie, N. (2010). Nursing and coping with stress. International Journal of Collaborative Research on Internal Medicine & Public Health, 2(5), 318–191.

Lambert, E. G., Minor, K. I., Wells, J. B., & Hogan, N. L. (2016). Social support’s relationship to correctional staff job stress, job involvement, job satisfaction, and organizational commitment. The Social Science Journal, 53(1), 22–32. https://doi.org/10.1016/j.soscij.2015.10.001

Leka, S., & Jain, A. (2010). Health impact of psychosocial hazards at work: An overview. WHO.

Mansour, S., & Mohanna, D. (2017). Mediating role of job stress between work-family conflict, work-leisure conflict, and employees’ perception of service quality in the hotel industry in France. Journal of Human Resources in Hospitality & Tourism, 1–21.

Masoom, M. R., & Hoque, M. K. (2018). The effect of gender, age, experience and industry on employees’ perceived stress: The case of Bangladesh. Romanian Journal of Applied Psychology, 2011, 18–27. https://doi.org/10.24513/rjp.20.1.04

McIveren, R., & Gross, R. (1997). Biopsychology. Education Section Review British Psychological Society, 21, 39. Leicester, England. https://www.amazon.co.uk/Biopsychology-Rob-McIveren.dp340673796

Melindo, S. M. A., Ellen, J. M. A., & Jeanne, S. (2010). Understanding stress. Routledge. http://www.helpguide.org

Mohajen, H. K. (2012). The occupational stress and risk of it among the employees. International Journal of Mainstream Social Science, 2(17), 1–34.

Mutawa, A. A., Alitawi, M., Saleh, W., & Awad, A. M. (2014). Comparison of academic staff in Eastern Saudi Arabia Preceding of the Social Sciences Research ICSSR. World Conferences. Net.9th-10th June, 2014. https://worldconferences.net/proceedings/icssr2014/toc_papers_icssr2014/.DOI:10.4067/2015610823

Ornek, O. K., & Sevin, E. (2018). Work-related stress and coping profiles among workers in outer garment sector: A cross-sectional study. www.preprints.org

Ozioke, R. E., Uwokwe, J. E., & Asadu, B. U. (2014). Job stress among staff in polytechnics of North-Central, Nigeria. Paripex-Indian Journal of Research, 3, 89–92.

Rampya, P., & Mallick, N. (2013). The impact of demographic variables on occupational stress among working women. JEMR, 3, 1–12.

Rani, R., & Singh, A. (2012). A study of occupational stress in relation to demographic variables. International Journal of Innovative Research and Development, 1(9), 253–270.

Rathie, I. (2014). Anxiety, depression and stress: A comparative study of school teachers working in residential and non-residential schools. International Journal Research Human Arts Literature, 2(8), 1–6.

Shafaghat, T., Zarchi, M. K. R., & Kavosi, Z. (2018). Occupational stress and how to confront it: A case study of a hospital in Shiraz. Hospital Practices and Research, 3(1), 61–65. https://doi.org/10.29252/hpr.2018.13

Sharma, S. (2018). Do demographic variables affect the stress levels of Indian soldiers? Journal of Business Perspective. https://doi.org/10.1177/0972262915610860

Sharma, S., & Kaur, R. (2013). The effect of demographic factors on occupational stress: A study of insurance sector. Annual Journal, 4, 61–83.

Soni, S. R., Vyas, J. M., Pustejuce, D. M., Kher, H. N., Thakkar, K. A., & Vijaya, L. M. (2015). Effect of demographic variables on organizational role stress and burnout: An empirical investigation. Journal of Psychiatry, 18(2), 233. https://doi.org/10.4172/Psychiatry.1000233

Wang, Y., Ramos, A., Wu, H., Liu, L., Yang, X., Wang, J., & Wang, L. (2015). Relationship between occupational stress, burnout and well-being among manufacturing workers: Mediating roles of psychological capital and self-esteem. BMC Psychiatry, 17, 364. https://doi.org/10.1186/s12888-017-1533-6
