

## EMPIRICAL MODEL OF PSYCHOLOGICAL INTERVENTION FOR EFFECTIVE MANAGEMENT OF THE RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR

\*John K. Aderibigbe<sup>1</sup>, Themba Q. Mjoli<sup>2</sup> Salawu H. Abu<sup>3</sup> & Onyinye C. Igboanusi<sup>4</sup>

<sup>1</sup>Department of Psychology, Nigeria Police Academy, Wudil/Department of Industrial Psychology, Faculty of Management and Commerce, University of Fort Hare, X1314, Alice 5700  
johnaderibigbe1@gmail.com\*

<sup>2</sup>Department of Industrial Psychology, Faculty of Management and Commerce, University of Fort Hare, X1314, Alice 5700

<sup>3&4</sup>Department of Psychology, Faculty of Social and Management Sciences, Nigeria Police Academy, Wudil

### **Ethics clearance number:** MJO071SADE01

*The manuscript is a compressed version of a completed PhD thesis, written by Dr. John K. Aderibigbe, supervised by Professor Themba Q. Mjoli, and edited by Mr. Brain Carlson (BK & AJ Carlson Professional Editing Services). Mr. S.H. Abu and Mrs. O.C. Igboanusi contributed as research assistants during the fieldwork, which was conducted in Nigeria.*

### **Abstract**

**Introduction:** *It is a documented fact that occupational stress is widespread worldwide. Moreover, there are clear signs of many variables that affect employees, which are most likely to cause severe occupational stress, and this, in turn, could negatively affect employees and organisational ability to perform. The study aimed at investigating psychological capital and emotional intelligence as moderators in the relationship between occupational stress and organisational citizenship behaviour among graduate employees in Nigeria, in a bid to develop an empirically tested psychological intervention model.*

**Methods:** *The study adopted the positivist explanatory cross-sectional (survey) research design to systematically sample opinions of 1,532 male and female graduate employees across the various sectors of the Nigerian economy, using a structured and validated questionnaire, and the Statistical Package for the Social Sciences (SPSS); and version 23 of the Analysis of Moment Structure (AMOS) to analyse data collected.*

**Results:** *The results showed that there was a weak positive relationship between occupational stress and organisational citizenship behaviour. Psychological capital and emotional intelligence significantly, jointly and independently moderated the relationship between occupational stress and organisational citizenship behaviour.*

**Conclusion:** *The hypothesized model of psychological intervention was empirically confirmed effective for managing occupational stress and promoting organisational performance.*

**Key words:** *Occupational stress, organisational performance, positivism, psychological intervention,*

## **Introduction**

Scholars have linked challenges that are related to employee performance in current employments to high levels of occupational stress (Baxter, 2010; Laschinger, 2011). In the same vein, studies have shown that occupational stress is significantly related to both task related work behaviour and non-task related work behaviour of employees (Adebiyi, 2013; Arogundade & Lawal, 2016). The World Health Organization has also reported occupational stress as a global epidemic (WHO, 2010). Obviously, the consequence of an increasingly strenuous work environment is evident in Nigerian work settings, as cases of job dissatisfaction, a high rate of absenteeism, employee intention to quit, labour turnover, and poor job performance (contrast to organisational citizenship behaviour) remain evident among graduate employees in Nigeria (Adebayo & Ogunsina, 2011; Adebiyi, 2013; Adetayo, Ajani & Olabisi, 2014; Arogundade & Lawal, 2016).

So far, broad studies throughout the years have focused more on identifying the stressors (Paillé, 2011; Brynien & Igoe, 2016). Literature further reveals that most studies conducted on occupational stress have concentrated on determinants, as opposed to results, such as employee performance, turnover intention, turnover behaviour and employee productivity (American Psychological Association, 2013; Goh, Pfe!er & Zenios, 2015). Hence, few scientific investigations have been conducted to devise psychological intervention strategies to ameliorate the situation and ensure organisational citizenship behaviour (Ahmad, Hussain, Saleem, Qureshi & Mufti, 2015).

Furthermore, though there is an increasing consideration of the phenomenon of organisational citizenship behaviour by researchers, a thorough review of the literature shows a lack of agreement about the scope of the concept (Farzianpour, Foroushani, Kamjoo & Hosseini, 2011). However, the current study sought to examine empirically the roles of psychological capital and emotional intelligence as moderators of the relationship between occupational stress and organisational citizenship behaviour; and propound a psychological intervention for the management of occupational stress and organisational performance in order to fill the existing vacuum identified in the literature.

## **Literature Review**

### **Occupational stress**

Occupational stress is a negative career-related concept that generates concerns among career holders, and it has the ability to influence individual and organisational outcomes (Beheshtifar & Nazarian, 2013). In other words, occupational stress is a negative phenomenon, the occurrence of which often stimulates an unpleasant response to the work environment making it appear threatening to the employees. Moreover, prolonged occupational stress could manifest itself physically, emotionally and psychologically in the lives of the affected employees.

The commonly reported physical symptom of occupational stress is a headache, which makes the affected employees unconsciously tense in their necks, foreheads and shoulder muscles (Chandra & Parvez, 2016). The other known symptoms of occupation stress are digestive problems, ulcers, hypertension, anxiety and inordinate sweating, coronary illness, strokes and even male pattern baldness (Chandra & Parvez, 2016). Emotionally, an affected employee frequently displays nervousness, outrage, depression, fractiousness, frustration to ordinary issues, dementia and an absence of focus for any assignment, because the mind of the individual is negatively impacted. The psychological manifestations of occupational stress, on the other hand, include withdrawal from society, phobias, compulsive behaviours, eating disorders and night fears

(Chandra & Parvez, 2016). It consequently results in counterproductive work behaviours or attributes such as intention to quit, low productivity and turnover behaviour among others (Yahaya, Yahaya, Ma'alip, Ramli & Kamal, 2012) if it is not well managed.

### **Organisational citizenship behaviour**

Organisational citizenship behaviour, is an essential phenomenon in the formal work setting because of its potency to facilitate interpersonal relationships among employees, and also to increase organisational performance (Pradhan, Jena & Bhattacharya, 2016). Organisational citizenship behaviour is an alternative form of performance behaviour, which is differentiated from the traditional performance that relies heavily on official assignments and tasks (Karolidis, 2016). For instance, having subordinates who are highly engaged in organisational citizenship may improve managers' efficiency by allowing them to devote a greater amount of time to long-range planning matters. Hence, managers, employees and the organisations at large benefit from the positive behaviours (Lelei, Chepkwony & Ambrose, 2016). These behaviours are explained by concepts such as pro-social behaviours, extra-role behaviours, contextual performance, spontaneous behaviours or organisational citizenship behaviour.

In the contemporary world of work, organisational citizenship behaviour is one of the variables that improves performance and the quality of services that are provided by the employees (Behtooee, 2016). It can lead the organization into achieving its aims and objectives. Organisational citizenship behaviour is a central part of performance management. Employees who engage in the behaviour are mostly found to be predisposed to it while others are shaped by the influence of the environment. It consequently implies that organisational citizenship behaviour could be the result of nature or nurture in terms of development, and it could as well be accounted for by the combination of the two broad factors.

### **Psychological capital**

The term 'psychological capital' (PsyCap) is a composite construct that is defined according to Luthans et al. (2007) as "a person's positive mental state of improvement, which is described by: (1) having confidence (self-efficacy) to take on and put in the needed effort so as to prosper at challenging responsibilities; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) determining toward goals and, when necessary, diverting ways to objectives (hope) with a specific end goal to succeed; and (4) when affected by issues and afflictions, managing, enduring and even going past (resilience) to reach success". According to Aliyev and Tunc (2015), psychological capital is a collection of abilities such as self-efficacy, optimism and endurance that are open to improvement, and it implies more than the collection of the aforementioned skills.

Specifically, capital signifies the quality of individuals' assets (human capital) as well as in connection with other constructs such as social capital, cultural capital and intellectual capital (Amunkete, 2015). The term 'psychological capital' also denotes individual motivational inclinations that accumulate through desirable psychological concepts such as optimism, resilience, hope and efficacy (Luthans et al., 2007). Besides, psychological capital is recognized in the situation of a venture in psychic resources that results in getting realistic incentives from the current moment while also brightening the prospect of future benefits. It is about the condition of the segment of an individual's inner life (Amunkete, 2015). Similarly, Peterson, Luthans, Avolio, Walumbwa and Zhang (2011) describe psychological capital as a common fundamental aptitude

that is essential to motivation, performance in the workplace, striving for success, and cognitive processing.

### **Relationship between occupational stress and organisational citizenship behaviour**

In a recent descriptive-correlational study of the relationship between organisational citizenship behaviour and occupational stress that was conducted among 122 midwives at Mashhad, Iran, by Nourani, Kohansal, Esmaily and Hooshmand (2016), it was found that there is a significant negative association between organisational citizenship behaviour and occupational stress. Likewise, Arogundade and Lawal (2016) investigated the influence of perceived occupational stress on the organisational citizenship behaviour among 300 male and female bankers in Lagos, Nigeria, using a simple random sampling technique. Though results of the study revealed that there is no significant difference in the levels of organisational citizenship behaviour that were exhibited by bankers with higher stress levels and those with lower stress levels, there is an inverse relationship between occupational stress and organisational citizenship behaviour.

Moreover, Soo and Ali (2016) studied the linkage between occupational stress and organisational citizenship behaviour among a sample of 472 bankers in Malaysia. The findings of Soo and Ali's (2016) study revealed that there is a significant negative impact of occupational stress on organisational citizenship behaviour. In the same vein, Gregory, Yitzhak and Steffen (2016) scientifically examined the proposed need to distinguish between self-initiated and organisationally imposed overload in studies of work stress, using three samples, which consisted of 116 male and female full-time employed students in three countries, some nursing staff of six private hospitals in Switzerland, and 161 middle manager-supervisor dyads in Switzerland. The study reveals in its findings that self-initiated imposed overload is significantly, positively related to organisational citizenship behaviour, but organisationally imposed overload is not a significant predictor of organisational citizenship behaviour.

Furthermore, Ikonne and Madukoma (2016) conducted a survey on the relationship among organisational citizenship behaviour, job stress and satisfaction among 109 librarians in some selected universities around the south-west region of Nigeria. The results of the study show that there is a significant negative relationship between organisational citizenship behaviour and job stress. In addition, Uzonwanne (2014) conducted a survey research on depression, anxiety and stress as correlates of organisational citizenship behaviour, using the accidental sampling technique to sample 151 female and 149 male employees of oil and gas companies in Ogun State, Nigeria. The outcomes of the research show that there is a significant positive relationship between occupational stress and organisational citizenship behaviour. The findings of the study also indicate that, though there is a statistical positive relationship between the two variables, the observed positive relationship is weak considering the  $r$  value of 0.118, which is close to 0.

### **Psychological capital as a moderator of the relationship between occupational stress and organisational citizenship behavior**

Aybas and Acar (2017) surveyed the mediating and moderating roles of psychological capital in the effects of opportunity enhancing HR practices and working conditions on work engagement among 555 white-collar employees of private companies from different sectors in Turkey, by using a convenience sampling method and a validated questionnaire to sample the views of respondents about the variables under consideration in the study. The results of the statistical analysis of data showed that psychological capital partially moderated and mediated the effects of opportunity enhancing HR practices and working conditions on work engagement.

Likewise, Wang, Liu, Zou, Hao and Wu (2017) conducted a cross-sectional survey research that investigated the mediating role of psychological capital on occupational stress, organisational support and work engagement among a sample size of 1016 female nurses that was drawn from the population of nurses in the general hospitals in Shenyang, Liaoning Province, China. A validated questionnaire was used to collect data from all participants in the study. The research findings showed that psychological capital and its components of hope and optimism are significant mediators of the relationships among work stress, work engagement and rewards.

In addition, Shaheen, Bukhari and Adil (2016) surveyed the moderating role of psychological capital on the relationship between organisational support and organisational citizenship behaviour among a sample size of 325 employees of public and private sector banks of Islamabad and Rawalpindi cities in Pakistan by using a convenience sampling technique, a validated questionnaire to gather information from the participants. The study discovered and established from its findings that psychological capital significantly enhanced the observed positive relationship between organisational support and organisational citizenship behaviour.

### **Emotional intelligence as a moderator of the relationship between occupational stress and organisational citizenship behavior**

Hameed (2016) studied the moderating role of emotional intelligence on the relationship between surface acting-emotional exhaustion and deep acting-emotional exhaustion among two samples: 471 female frontline service employees and 76 supervisors and heads of different hotels in Pakistan. The results of the investigation indicate that emotional intelligence moderates surface-acting emotional exhaustion relationships as well as deep-acting emotional exhaustion connections. The findings further showed that emotional exhaustion mediated the relationship between surface acting-adaptive performance and deep acting-adaptive performance. However, Hwa and Amin (2016) in their survey of the moderating role of emotional intelligence in the relationship between emotional labour, deviant behaviour and organisational citizenship behaviour among a sample size of 205 male and female employees that were drawn from the population of employees in the Malaysian Employer Directory, report that emotional intelligence is not a significant moderator of the relationship between emotional labour and organisational citizenship behaviour.

On the other hand, Gökçe et al. (2015) conducted an empirical study on the mediating role of emotional regulation in the relationship between job stress and performance among a sample size of 392, which was drawn from a population of employees that are working in the automotive sector in Diyarbakır, Turkey. The findings of the study show that emotional regulation plays a significant mediating role in the relationship between job stress and performance.

Likewise, Soran, Balkan and Serin (2014) examined the moderating impact of emotional intelligence on the relationship between job stress and employee performance among 265 bankers in Turkey. In their study, performance was equated to employee citizenship behaviour. The outcomes of the study revealed that emotional intelligence had a moderator effect on the relationship between job stress and employee performance.

### **Psychological capital and emotional intelligence as joint moderators of the relationship between occupational stress and organisational citizenship behavior**

Recently, Boerrigter (2017) conducted a cross-sectional survey research titled “What makes employees highly engaged and performing: Leaders’ emotional intelligence, service climate and

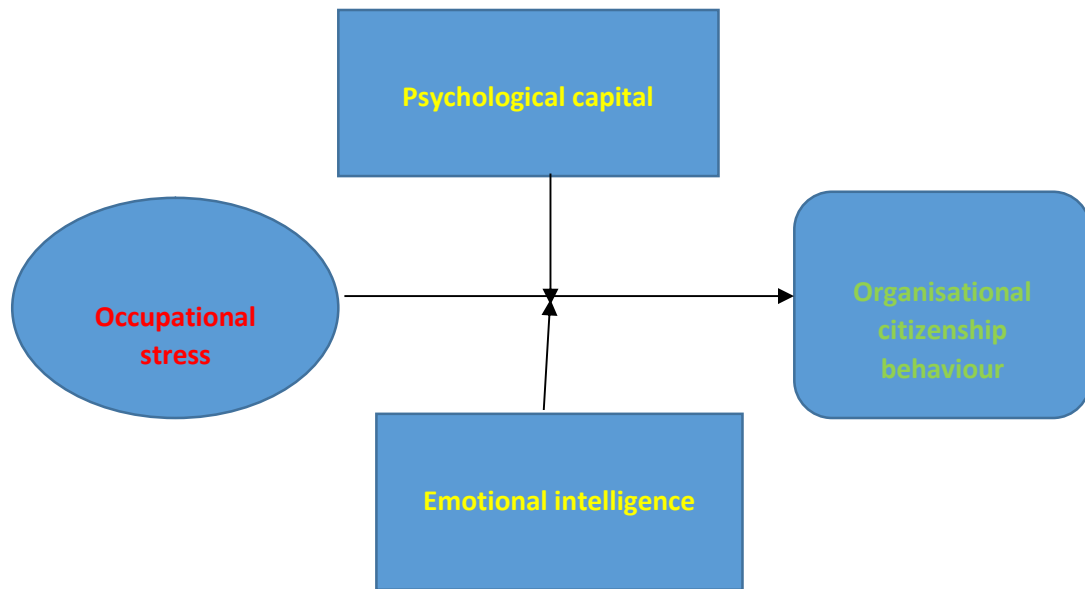
psychological capital”, among a sample size of 197 drawn from a total of 1576 employees of a global professional service organization in the Netherlands. It used a validated questionnaire to collect data from the participants, and analysed the data collected statistically. The results of the statistical analysis of data revealed that there is a partial mediating effect of service climate and psychological capital on the relationship between a leader’s emotional intelligence and job performance.

### **Critique of the literature and justification of the study**

It is important to note that the review of the literature shows that efforts toward psychological interventions on the issues of occupational stress and organisational citizenship behaviour (employee/organisational performance) is ongoing, yet not many of the proposed models of the moderating effects of the moderators are confirmed, as against the expectations. Likewise, it is worthwhile to note that from the literature reviewed in this study there is paucity of studies of the joint or interactive effect of two or more moderators on the existing organisational issues. By implication, it has limited the discovery of the possible psychological interventions that explore all potential remedies, in the form of human endowments, to solve or cope with career related problems. Bearing in mind the above, the present study proposes the following eclectic psychological interventional model:

#### **Conceptual model**

Based on the past studies reviewed and on logical grounds, a conceptual model was developed indicating the hypothesised relationship between occupational stress and organisational citizenship behaviour; the independent moderating role of psychological capital; the independent moderating role of emotional intelligence; and the joint moderating role of psychological and emotional intelligence in the relationship between occupational stress and organisational citizenship behaviour. Organisational citizenship behaviour is depicted as the dependent variable, occupational stress is depicted as the independent variable, whereas psychological capital and emotional intelligence are shown as moderators. The conceptual model, demonstrated in Figure 1 indicates the moderating role of psychological capital and emotional intelligence in the relationship between occupational stress and organisational citizenship behaviour.



*Figure 1: A proposed model of psychological intervention for effective management of the relationship between occupational stress and organisational citizenship behaviour*

#### Statement of hypotheses

##### Hypothesis 1

H<sub>0</sub>: Occupational stress is not significantly positively correlated with organisational citizenship behaviour.

H<sub>1</sub>: Occupational stress is significantly positively correlated with organisational citizenship behaviour.

##### Hypothesis 2

H<sub>0</sub>: Psychological capital is not a significant moderator of the relationship between occupational stress and organisational citizenship behaviour.

H<sub>1</sub>: Psychological capital is a significant moderator of the relationship between occupational stress and organisational citizenship behaviour.

##### Hypothesis 3

H<sub>0</sub>: Emotional intelligence is not a significant moderator of the relationship between occupational stress and organisational citizenship behaviour.

H<sub>1</sub>: Emotional intelligence is a significant moderator of the relationship between occupational stress and organisational citizenship behaviour.

##### Hypothesis 4

H<sub>0</sub>: Psychological capital and emotional intelligence are not significant joint moderators of the relationship between occupational stress and organisational citizenship behaviour.

H<sub>1</sub>: Psychological capital and emotional intelligence are significant joint moderators of the relationship between occupational stress and organisational citizenship behaviour.

## **Research Methodology**

### **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 (Bhattacharjee, 2012).

The probability (The North Carolina Center for Public Health Preparedness' (2013) two-stage sampling scheme, and The Research Advisor (2006) Calculated Sample Size Table), and non-probability sampling (purposive and convenience) techniques were employed in this investigation. The sample comprised of 916 (60%) male and 616 (40%) female graduate employees from 19 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. The participants' ages ranged from 20 years to 65 years old. Relatively, 974 (63.6%) of the participants were senior staff while the remaining 558 (36.4%) were junior staff. Conclusively, among the participants, 730 (47.7%) were employed by the government while the remaining 802 (52.3%) were working under the employment of private organisations.

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.

### **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: MJO071SADE01).



## **Measuring instruments**

Four established scales of measurement were employed to assess psychological capital, occupational stress and organisational citizenship behaviour.

### **Psychological capital**

A 24-item scale of psychological capital that was developed and validated by Luthans et al. (2007) was utilised to measure psychological capital. The construct consisted of self-efficacy, hope-state, optimism-state and resilience-state sub-scales, with a 5-point Likert-type response format ranging from 1/(Strongly disagree) to 5/(Strongly agree). The authors reported a Cronbach Alpha coefficient score of 0.91 for the scale. However, the outcome of the pilot factor analysis of this study reduced the scale-item to 21, and yielded Cronbach Alpha coefficient scores of 0.88 (self-efficacy), 0.91 (hope), 0.85 (resilience), 0.67 (optimism) and 0.94 for the whole scale of psychological capital, while the main study's factor analysis yielded a Cronbach Alpha coefficient score of 0.85 for the whole scale of psychological capital.

### **Occupational stress**

A 9-item scale of job stress that was developed and validated by Jamal and Baba (1992) was utilised to measure occupational stress. The measure was designed with a 5-point Likert-type response format ranging from 1/(Strongly disagree) to 5/(Strongly agree). The authors reported a Cronbach Alpha coefficient score of 0.83 for the scale. However, the outcome of the pilot factor analysis of this study reduced the scale-item to 7, and yielded Cronbach Alpha coefficient scores of 0.81, while the main study's factor analysis yielded a Cronbach Alpha coefficient score of 0.80 for the measure of occupational stress.

### **Emotional Intelligence**

A 10-item modified version of Palmer and Stough's (2001) emotional intelligence questionnaire by Seyal, Afzaal and Chin (2012). The construct consisted of emotional self-control, emotional self-awareness, emotional expression and emotional awareness of others sub-scales, with a 5-point Likert-type response format ranging from 1/(Strongly disagree) to 5/(Strongly agree). Seyal, Afzaal and Chin (2012) reported a Cronbach Alpha coefficient score of 0.92 for the whole scale of emotional intelligence. However, the outcome of the pilot factor analysis of this study reduced the scale-item to 2, and yielded Cronbach Alpha coefficient scores 0.57 for the scale of emotional intelligence, while the main study's factor analysis yielded a Cronbach Alpha coefficient score of 0.81 for the scale of emotional intelligence.

### **Organisational citizenship behaviour**

A 15-item modified version of Podsakoff, Mackenzie, Moorman, and Fetter's (1990) organisational citizenship behaviour questionnaire by Argentero, Cortese and Ferretti (2008) was utilised to measure organisational citizenship behaviour. The construct consisted of altruism, conscientiousness and civic virtue sub-scales, with a 5-point Likert-type response format ranging from 1/(Strongly disagree) to 5/(Strongly agree). Argentero, Cortese and Ferretti (2008) reported the following Cronbach Alpha coefficients for the scale: altruism =0.81, conscientiousness =0.73, civic virtue =0.73 and 0.84 for the whole scale of organisational citizenship behaviour. However,

the outcome of the pilot factor analysis of this study reduced the scale-item to 13, and yielded Cronbach Alpha coefficient of 0.88 (altruism), 0.81 (conscientiousness), 0.86 (civic virtue) and 0.93 for the whole scale of organisational citizenship behaviour, while the main study's factor analysis yielded a Cronbach Alpha coefficient score of 0.82 for the whole scale of organisational citizenship behaviour.

### 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), and version 23 of the Analysis of Moment Structure (AMOS). Hypothesis 1 was analysed, using Pearson Correlation Analysis. Hypothesis 2, 3 and 4 were analysed using Multiple Regression Analysis, while the Structure Equation Model was performed in order to further confirm the structured model.

### Research results

Hypothesis 1 was analysed using Pearson Correlation Analysis. The results of the analysis are therefore presented in table 1 below:

**Table 1: A Summary Table of Pearson Correlation Analysis Showing the Relationship between Occupational Stress and Organisational Citizenship Behaviour**

Variable	OCB	OS
Organisational citizenship beh. (OCB)	1	.070**
sig. (2-tailed)		.006
n	1532	1532
Occupational stress (OS)	.070**	1
sig. (2-tailed)	.006	
n	1532	1532

**\*\* Correlation is significant at the 0.01 level (2-tailed)**

From the table 1 presented above, the results show that there is a positive relationship between occupational stress and organisational citizenship behaviour,  $r = 0.070$ ,  $p < 0.01$ . Even though there is a positive relationship observed between occupational stress and organisational citizenship behaviour, the level of the observed positive relationship between the two aforementioned variables is feeble, considering the given significance value,  $0.006 = 0.01$  (approximated to 2 decimal points), which is exactly the maximum limit of acceptable value of significance at the 0.01 level (2-tailed). Therefore, based on the results and interpretations above, hypothesis 1  $H_0$  is rejected while hypothesis 1  $H_1$  is accepted.

Hypothesis 2 was analysed using Multiple Regression Analysis. The results of the analysis are therefore presented in table 2 below:

**Table 2: A Summary Table of Multiple Regression Analysis Showing the Moderating Role of Psychological Capital in the Relationship between Occupational Stress and Organisational Citizenship Behaviour**

Variable	R	R <sup>2</sup>	B	T	F	P
Occupational stress	0.105	0.010	0.070	2.738	8.514	0.006
Occupational stress, Psychological capital with Occupational stress			0.064	2.490		0.000

- a. Dependent variable: Organisational citizenship behaviour (OCB)
- b. Predictor: Occupational stress (OS)
- c. Predictor, Moderator with Predictor: OS, PsyCap with OS

The results in the table 2 above show that psychological capital is a significant moderator of the relationship between occupational stress and organisational citizenship behaviour,  $F(2,1529) = 8.514$ ;  $R^2 = 0.011$ ;  $p < .01$ . The results also indicate that occupational stress independently predicts organisational citizenship behaviour, ( $\beta = 0.070$ ;  $t = 2.738$ ;  $p < .05$ ). It further shows that the moderating role of psychological capital accounts for only 1% of the total variance in the relationship between occupational stress and organisational citizenship behaviour. It thus, implies that many other factors that were not considered in the study could be responsible for the remaining 99% variance in the relationship between occupational stress and organisational citizenship behaviour could. In view of the above results and its interpretations, hypothesis 2  $H_0$  is rejected, while the  $H_1$  is accepted.

Hypothesis 3 was analysed using Multiple Regression Analysis. The results of the analysis are therefore presented in table 2 below:

**Table 3: A Summary Table of Multiple Regression Analysis Showing the Moderating Role of Emotional Intelligence in the Relationship between Occupational Stress and Organisational Citizenship Behaviour**

Variable	R	R <sup>2</sup>	B	t	F	P
Occupational stress	0.088	0.008	0.063	2.473	5.945	0.013
Occupational stress, Emotional intelligence with Occupational stress			0.054	2.092		0.003

- a. Dependent variable: Organisational citizenship behaviour (OCB)
- b. Predictor: Occupational stress (OS)
- c. Predictor, Moderator with Predictor: OS, EI with OS

The results in the table 3 above show that emotional intelligence is a significant moderator of the relationship between occupational stress and organisational citizenship behaviour,  $F(2,1529) = 5.945$ ;  $R^2 = 0.008$ ;  $p < .05$ . The results also indicate that occupational stress independently predicts organisational citizenship behaviour, ( $\beta = 0.063$ ;  $t = 2.473$ ;  $p < .05$ ). It further shows that the moderating role of emotional intelligence accounts for 8% of the total variance in the relationship between occupational stress and organisational citizenship behaviour. It thus implies that some other factors that were not considered in the study could be responsible for the remaining 92% variance in the relationship between occupational stress and organisational citizenship behaviour could. In view of the above results and its interpretations, hypothesis 2  $H_0$ , is rejected while the  $H_1$  is accepted.

Hypothesis 4 was analysed using Multiple Regression Analysis and Structural Equation Model. The results of the analysis are therefore presented in tables 4 and 5 below:

**Table 4: A Summary Table of Multiple Regression Analysis Showing Psychological Capital and Emotional Intelligence as Joint Moderators of the Relationship between Occupational Stress and Organisational Citizenship Behaviour**

Variable	R	R <sup>2</sup>	B	T	F	P
Emotional intelligence, Psychological capital with occupational stress	0.432	0.186	0.432	18.753	221.240	0.000

- a. Dependent Variable: Organisational citizenship behaviour (OCB)
- b. Moderators with Predictor: Emotional intelligence, Psychological Capital with Occupational stress

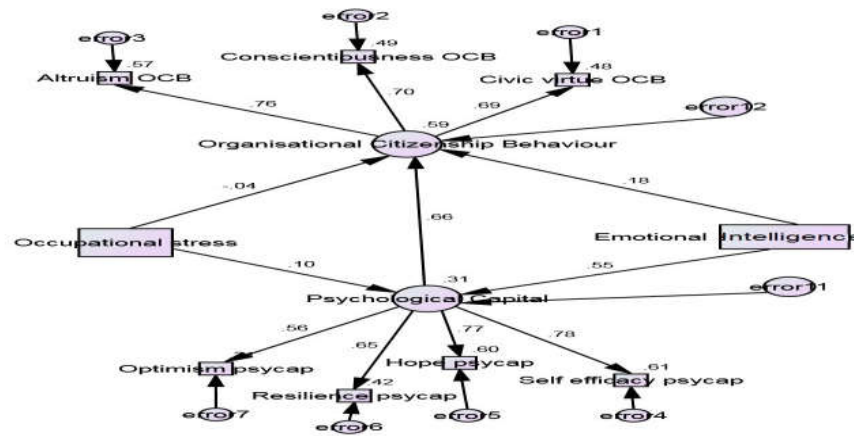
The results in the table 4 above reveal that psychological capital and emotional intelligence are significant joint moderators of the relationship between occupational stress and organisational citizenship behaviour,  $F(1,1530) = 221.240$ ;  $R^2 = 0.186$ ;  $p < .01$ . The results further show that the joint moderators (emotional intelligence with psychological capital) accounts for 19% of the total variance in the relationship between occupational stress and organisational citizenship behaviour. It therefore means that some other factors that were not considered in the study could be responsible for the remaining 81% variance in the relationship between occupational stress and organisational citizenship behaviour. In addition, the table 5 and figure 2 below present the results of a statistical validation of the proposed model, using Structural Equation Analysis.

**Table 5: A Summary Table of Structural Equation Analysis Showing the Standardized Direct Effects of Variables in the Model of Occupational Stress and Organisational Citizenship Behaviour**

Variables		Estimate	P
Psychological capital	<----- Emotional intelligence	0.547	***
Psychological capital	<----- Occupational stress	0.100	***
Organisational citizenship behaviour	<----- Occupational stress	-0.038	0.105
Organisational citizenship behaviour	<----- Emotional intelligence	0.183	***
Organisational citizenship behaviour	<----- Psychological capital	0.657	***
Civic virtue_OCB	<----- Organisational Citizenship Behaviour	0.695	***
Altruism_OCB	<----- Organisational Citizenship Behaviour	0.756	***
Conscientiousness_OCB	<----- Organisational Citizenship Behaviour	0.696	***
Self-efficacy_PsyCap	<----- Psychological capital	0.782	***
Hope_PsyCap	<----- Psychological capital	0.774	***
Resilience_PsyCap	<----- Psychological capital	0.647	***
Optimism_PsyCap	<----- Psychological capital	0.558	***

Sample size = 1532  
 Chi-square = 76.703  
 Degrees of freedom = 24  
 Probability level = 0.000  
 RMSEA = 0.273

Figure 2 below depicts Structural Equation Showing the Path Coefficients for the Model Testing

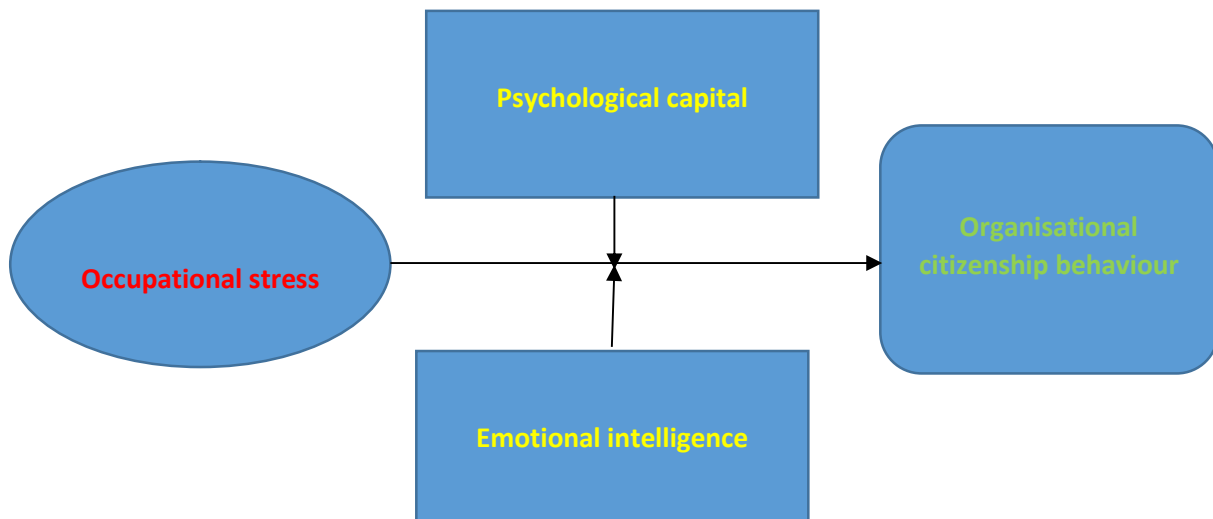


Occupational stress and organisational citizenship behaviour model

**Figure 2 Structural equation model of psychological intervention for effective management of the relationship between occupational stress and organisational citizenship behaviour**

The results in the table 5 and in figure 2 above reveal that psychological capital has a direct and significant positive effect on organisational citizenship behaviour,  $R = 0.657$ ,  $p < .001$ . Similarly, the results show that emotional intelligence has a direct and significant positive effect on

organisational citizenship behaviour,  $R = 0.183$ ,  $p < .001$ . However, the results indicate that occupational stress neither directly nor positively affects organisational citizenship behaviour,  $R = -0.038$ ,  $p > .05$ . On the other hand, the results in the table 5 and in figure 2 above further demonstrate that psychological capital has a direct and significant positive effect on occupational stress,  $R = 0.100$ ,  $p < .001$ . Moreover, the results prove that emotional intelligence has a direct and significant positive effect on psychological capital,  $R = 0.547$ ,  $p < .001$ . Still, from table 5.7 and figure 11 above, the results show that civic virtue ( $R = 0.695$ ,  $p < .001$ ), altruism ( $R = 0.756$ ,  $p < .001$ ) and conscientiousness ( $R = 0.696$ ,  $p < .001$ ) have a significant individual positive effect on organisational citizenship behaviour. Similarly, the results reveal that self-efficacy ( $R = 0.782$ ,  $p < .001$ ), hope ( $R = 0.774$ ,  $p < .001$ ), resilience ( $R = 0.647$ ,  $p < .001$ ) and optimism ( $R = 0.558$ ,  $p < .001$ ) have a significant individual positive effect on psychological capital. In view of the above results and the interpretations of structural equation analysis, the study therefore confirmed and accepted the presented model of the structured model. The confirmed model is presented in figure 3 below.



**Figure 3: Empirical model of psychological intervention for effective management of the relationship between occupational stress and organisational citizenship behaviour**

### Discussion

The results presented established the hypothesized relationship and moderations in the conceptual model (figure 1). A weak positive relationship was found existing between occupational stress and organisational citizenship behaviour. This explains that though there is an indication of a positive relationship between occupational stress and organisational citizenship behaviour, but the observed level of positive relationship between the two variables is not reliable enough. Thus perhaps, it requires the introduction of one or more positive variables, to serve as moderators or mediators in order to yield a more significant and reliable relationship between occupational stress and organisational citizenship behaviour. These findings corroborate the reports of Uzonwanne (2014), which states that there is a weak positive relationship between occupational stress and organisational citizenship behaviour. Similarly, Soo and Ali (2016) report further that self-initiated imposed work-overload is significantly, positively related to organisational citizenship behaviour, but organisationally imposed overload is not a significant predictor of organisational citizenship behaviour.

In terms of moderation, psychological capital was found to have independently demonstrated a significant level of moderating role in the observed positive relationship between occupational stress and organisational citizenship behaviour. Although, the results shows that there are many other variables or factors, which are of a similar nature with psychological capital, and could have also moderated the relationship between occupational stress and organisational citizenship behaviour, but were not considered in the structured model. The observed results are supported by the findings of Aybas and Acar (2017) which show that psychological capital partially moderated and mediated the effects of opportunity enhancing HR practices and working conditions on work engagement. Likewise, Wang, Liu, Zou, Hao and Wu (2017) report that psychological capital and its components of hope and optimism are significant mediators of the relationships among work stress, work engagement and rewards.

Likewise, emotional intelligence was found to have independently demonstrated a significant level of moderating role in the observed positive relationship between occupational stress and organisational citizenship behaviour. The observed results are supported by the findings of Hameed (2016) which indicate that emotional intelligence moderates surface-acting emotional exhaustion relationships as well as deep-acting emotional exhaustion connections. The findings further show that emotional exhaustion mediated the relationship between surface acting-adaptive performance and deep acting-adaptive performance. Gökçe et al. (2015) also report that emotional regulation plays a significant mediating role in the relationship between job stress and performance.

Lastly, concerning the joint moderation, psychological capital and emotional intelligence were found to have jointly significantly moderated the observed relationship between occupational stress and organisational citizenship behaviour. Specifically, psychological capital and emotional intelligence have demonstrated 19% joint moderating influence in the relationship between occupational stress and organisational citizenship behaviour. This implies that employee with higher levels of psychological capital and emotional intelligence will perform significantly better those with lower levels, even in the face of stressful and challenging work conditions. These findings are supported by the findings of by Boerrigter (2017), which revealed that there is a partial mediating effect of service climate and psychological capital on the relationship between a leader's emotional intelligence and job performance.

## **Conclusion**

This study concludes that there is a positive relationship between occupational stress and organisational citizenship behaviour. It further concludes that psychological capital and emotional intelligence are significant independent and joint moderators of the relationship between occupational stress and organisational citizenship behaviour. Also, the study demonstrated that the proposed model of psychological intervention for effective management of occupational stress and organisational citizenship behaviour is empirically confirmed valid. The researchers therefore, finally submit that the study's findings contribute specifically to the existing literature on psychology of positivity, occupational stress, organisational citizenship behaviour and also to the literature on employee performance management.

## **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 only two moderating variable were considered in the structured model. Future research should test beyond moderating effects, as there are possibilities of mediating effects by some other variables.

## Recommendation

In view of the above discussion of the findings, the researchers makes the following practical recommendations:

- that the tertiary institutions' management, most especially of the universities, should incorporate in their academic curricula some practical simulated work exercise that will pre-expose the graduating students to the challenges at the world of work. This will build their psyche, and make them mentally and emotional ready to overcome any stressful situation that may come their way, even in the cause of discharging of career duties or responsibilities through the positivism approach. This can be achieved by a deliberate inclusion of moderately difficult practical group assignments in the syllabus that will task each student in a group, to proactively think 'outside the box' and proffer visible solutions in the form of suggestions to the problems at hand. By so doing, the students will develop reasonable levels of hope, resilience, optimism, self-efficacy and empathy along with the acquired theoretical knowledge of their disciplines while the universities can as well boast of producing capable graduate who will fit perfectly into the realities of the world of work and promptly deliver.
- that the model psychological intervention for effective management of the relationship between occupational stress and organisational citizenship behaviour, developed in this study, should be adopted and applied by teachers, lecturers, seminar facilitators, workshop trainers, supervisors and managers during their coaching or training sessions. Specifically, the focus should be on training the individual employees or graduates to discover their covert behavioural endowments such as psychological capital, and make them refined through a systematic training process that converts the covert behavioural gifts into overt psychological assets in the form of demonstrable managerial competencies, which can enhance their performance on the job, and also enable them to be prosocial among colleagues in the work settings.

## References

- Baxter, P.E. (2010). Providing orientation programs to new graduate nurses: Points to consider. *Journal for Nurses in Staff Development*, 26: E12-E17.
- Laschinger, H.K.S. (2011). Job and career satisfaction and turnover intentions of newly graduated nurses. *Journal of Nursing Management*. Advance online publication.
- Adebisi, D.R (2013). Occupational stress among academic staff of Ekiti State University, Ado-Ekiti. *European Scientific Journal*, 9(4): 202-208.
- Arogundade, O.T. & Lawal, O. (2016). The influence of perceived occupational stress on the organizational citizenship behaviour of bankers in Ikeja, Lagos State. *European Scientific Journal*, 12(17): 449-458.
- World Health Organization (2010). *Healthy workplaces: A model for action for employers, workers, policymakers and practitioners*. Geneva: WHO.



- Adebayo, S.O. & Ogunsina, S.O. (2011). Influence of supervisory behaviour and job stress on job satisfaction and turnover intention of police personnel in Ekiti State. *Journal of Management and Strategy*, 2(3): 13-20.
- Adetayo, J.O., Ajani J.O. & Olabisi, O. (2014). An overview of the effects of job stress on employees' performance in Nigeria Tertiary Hospitals. *Ekonomika*, 60(4): 139-153.
- Arogundade, O.T. & Lawal, O. (2016). The influence of perceived occupational stress on the organizational citizenship behaviour of bankers in Ikeja, Lagos State. *European Scientific Journal*, 12(17): 449-458.
- Paillé, P. (2011). Stressful work, citizenship behaviour and intention to leave the organization in a high turnover environment: Examining the mediating role of job satisfaction. *Journal of Management Research*, 3 (1): 1-14.
- Brynien, K. & Igoe, A. (2016). Occupational stress factsheet. *PEF Health and Safety Department: (800) 342-4306 x 254 or (518) 785-1900 x 254*.
- American Psychological Association (2013). Stress in America: Missing the health care connection.
- Goh, J., Pfeiler, J., & Zenios, S. A. (2015). Workplace stressors & health outcomes: Health policy for the workplace. *Behavioural Science & Policy*, 1(1): 43–52.
- Ahmad, A., Hussain, A., Saleem, M.Q., Qureshi, M.A.M. & Mufti, N.A. (2015). Workplace stress: A critical insight of causes, effects and interventions. *Technical Journal, University of Engineering and Technology, Taxila, Pakistan*, 20 (2): 45-55.
- Farzianpour, F., Foroushani, A.R., Kamjoo, H. & Hosseini, S.S. (2011). Organisational citizenship behaviour (OCB) among the managers of teaching hospitals. *American Journal of Economics and Business Administration* 3(3): 534-542.
- Beheshtifar, M. & Nazarian, R. (2013). Role of occupational stress in organizations. *Interdisciplinary Journal of Contemporary Research in Business*, 4 (9): 648-657.
- Chandra, N. & Parvez, R. (2016). A review article: Impact of environmental and occupational stress on health. *Paripex - Indian Journal of Research*, 5(5): 456-457.
- Yahaya, A., Yahaya, N., Ma'alip, H., Ramli, J. & Kamal, M.M. (2012). The relationship between the occupational stress, organisational commitment, and job satisfaction with organisational citizenship behaviour. *Archives Des Sciences*, 65 (3): 55-73.
- Pradhan, R.K. & Jena, L.K. & Bhattacharya, P. (2016). Impact of psychological capital on organizational citizenship behavior: Moderating role of emotional intelligence. *Cogent Business & Management*, 3(1): 1-16.
- Karolidis, D. (2016). Organisational citizenship behaviour in the Greek public sector. *Interdependent Programme of Postgraduate Studies in Business Administration, University of Macedonia*.
- Lelei, J.C., Chepkwony, P.K. & Ambrose, K. (2016). Effect of organisational citizenship behaviour on employee performance in banking sector, Nairobi County, Kenya. *International Journal of Business, Humanities and Technology*, 5(4): 55-61.
- Behtooee, L. (2016). A model for explanation of social capital in organizations, psychological empowerment, job involvement, and organisational citizenship behaviour. *International Journal of Advanced and Applied Sciences*, 3(5): 80-87.
- Luthans, F., Avolio, B.J., Avey, J.B., & Norman, S.M. (2007). Psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60: 541-572.
- Aliyev, R. & Tunc, E. (2015). Self-efficacy in counseling: The role of organizational psychological capital, job satisfaction and burnout. *Procedia-Social Beh. Sci.*, 190: 97-105.
- Amunkete, S.L.N. (2015). Psychological capital in Namibian state-owned enterprises: measurement, antecedents and outcomes. *Ph.D Thesis, North-West University, South Africa*.

- Peterson, S.J., Luthans, F., Avolio, B.J., Walumbwa, F.O., & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology, 64*: 427–440.
- Nourani, S.S., Kohansal, D.Z., Esmaily, H. & Hooshmand, E. (2016). The relationship between organisational citizenship behaviour, job satisfaction and occupational stress among Midwives Working in Healthcare Centers of Mashhad, Iran. *Journal of Midwifery and Reproductive Health, 4(2)*: 622-630.
- Soo, H.S. & Ali, H. (2016). The linkage between stress and organizational citizenship behaviour. *International Business Management 10(14)*: 2713-2718.
- Gregory, A.L., Yitzhak, F. & Steffen, R. (2016). Evidence for the need to distinguish between self-initiated and organizationally imposed overload in studies of work stress. *Work & Stress, 30(4)*: 337-355, DOI: 10.1080/02678373.2016.1253045.
- Ikonne, C.N. & Madukoma, E. (2016). An investigation of the relationship between job satisfaction, job stress and organizational citizenship behavior: A research on librarians in Nigerian University Libraries. *International Journal of Science and Research, 5(8)*: 480-484.
- Uzonwanne, F.C. (2014). Depression, anxiety and stress as correlates of organizational citizenship behaviour among oil workers in Nigeria. *European Journal of Globalization and Development Research, 10(1)*: 619-637.
- Aybas, M. & Acar, A.C. (2017). The effect of human resource management practices on employees' work engagement and the mediating and moderating role of positive psychological capital. *International Review of Management and Marketing, 7(1)*:363-372.
- Wang, X., Liu, L., Zou, F., Hao, J. & Wu, H. (2017). Associations of occupational stressors, perceived organizational support, and psychological capital with work engagement among Chinese Female Nurses. *BioMed Research International, 2017(5284628)*: 1-11.
- Shaheen, S., Bukhari, I., & Adil, A. (2016). Moderating role of psychological capital between perceived organizational support and organizational citizenship behaviour and its dimensions. *International Journal of Research Studies in Psychology, 5(2)*: 41-50.
- Hameed, F. (2016). Impact of personality on adaptive performance with mediating role of emotional labor: Testing a mediated moderated model among front-line female hospitality industry employees in Pakistan. *PhD Thesis, Department of Management & Social Sciences, Capital University of Science & Technology, Islamabad.*
- Hwa, M.A.C. & Amin, H. (2016). Why emotion at work matters: Examining the influence of emotional labour and emotional intelligence on workplace behaviours among service workers in East Malaysia. *Kajian Malaysia, 34(1)*: 79–105.
- Gökçe, S.G., Emhan, A., Topuz, G. & Şimşek, M.S. (2015). The analysis of the relationship between job stress, interpersonal conflict, emotion regulation ability and performance: A research in the automotive sector. *International Journal of Business and Social Science, 6(8)*: 201-208.
- Soran, S. Balkan, M.O. & Serin, M.E. (2014). Job stress and performance: The mediating effect of emotional intelligence. *European Journal of Business and Social Sciences, 3(5)*: 67-75.
- Boerriqter, C.M.M. (2017). What makes employees highly engaged and performing? Leaders' emotional intelligence, service climate and psychological capital. *Master Thesis, Department of Change Management & Organizational Behaviour, University of Twente.*
- Bhattacharjee, A. (2012). Social science research: Principle, methods and practices. *Textbook collection. Book 3.*
- North Carolina Center for Public Health Preparedness (2013). Two-stage cluster sampling: general guidance for use in public health assessments. Cited in Aramide, O.K. (2014). Relationship between the use of family planning related information and attitudes of rural childbearing

women toward family planning. *A Ph.D Thesis, Postgraduate School, Babcock University, Nigeria, 73-75.*

The Research Advisors (2006). <http://research-advisors.com>.

Jamal, M. & Baba, V.V. (1992). Shiftwork and department type related to job stress, work attitudes and behavioural intentions: A study of nurses. *Journal of Organisational Behaviour, 13*: 449–464.

Palmer, B. & Stough, C. (2001). Workplace SUEIT – Swinburne university emotional intelligence test. Swinburne University, Organisational Psychology Research Unit, Australia.

Seyal, A.H., Afzaal, T. & Chin, S.T.S. (2012). Assessing emotional intelligence and organisational citizenship behaviour among Executives: Examples from Brunesian SMEs. *International Business Management, 6*(4): 476-486.

Podsakoff, P. M., Mackenzie, S.B, Moorman, R.H., & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction and organisational citizenship behaviour. *The Leadership Quarterly, 1*(2): 107-142.