studies have indicated that workplace stress is a significant factor that may affect organizational performance (Kahn, Byosiere 1992; McEwen 2007). Jennings (2007) states that workplace stress is a controversial issue that may affect performance. It is also argued that workplace stress could influence employees’ attitudes (Weiss 2012; Taiwo 2010; Wagner, Harter 2006), lead to absenteeism (Robbins, Judge 2008), intention to leave, dissatisfaction, low productivity and high labour turnover (Kaufman et al. 2013). Danna and Griffin (2002) also state that stressful working conditions are associated with increased absenteeism, tiredness and intention of employees to quit their job.

There are many factors which can trigger stress in the workplace. One of such factors is role conflict (Weiss 2012). Role conflict is a stressor that occurs as a result of multiple roles (Butler, Constantine 2005). Heavy workload (Spector 2008) and uncertainty (Pinder 2008) are also factors which could adversely impact on employees’ performance. Studies by Liu, Yang, Nauta (2013) reveal that injustice and unfairness affects individual and corporate performance. Other
mitigating sources of workplace stress includes lack of recognition or engagement; long work hours (Aluko 2007), inadequate training (Greenberg, Baron 2003; Salau, et al. 2014), poor time management (Cooper, Payne 2008); poor relationship with supervisors and colleagues (Hicks, Caroline 2007; Oakland, S., Oakland, J. 2001); inequality (Fadil et al. 2005; Siegel et al. 2007); job insecurity (Monat, Lazarus 2001). It is necessary that organizations provide interventions against these factors so as to ensure job satisfaction and increased productivity. Job satisfaction or lack of it is fundamental to the intention of employees to stay or quit a job. It is also a pointer to poor employee performance (Martin, Miller 1986) and low job commitment (Robbins, Judge 2008). Potentially, increased level of job stress could translate to decreased job satisfaction. This is because employees are more likely to be committed, creative and productive at work when they are reasonably satisfied with their jobs (Chandraiah et al. 2003).

Currently, higher education in Nigeria, particularly in universities, is characterized by massive expansion and high rate of students’ enrolment. The likely effects of this include; increased workload for members of the workforce, increased pressure, a sense of powerlessness conflicting demands, organizational change, and a high degree of uncertainty (Cooper, Payne 2008). Within the internal environment of the workplace, physical conditions can also trigger stress (Fried 2008). For instance, excessive noise within the workplace can cause physical and behavioral problems. Severe vibration can have similar effects. Hot, humid conditions and constant presence of hazardous substances or other hazards can also trigger stress (Aldana et al. 1996). Workplace stress may encourage truancy which may later result in high turnover (Cooper, Payne 2008). It is important that organizations in Nigeria’s higher education sector, whether public or private, understand that high levels of workplace stress can become harmful for individual employees and the organization as a whole. Hence, to enhance corporate image and achieve competitive advantage, stress management and coping strategies become imperative (Monat, Lazarus 2001; Adeniji, Osibanjo 2012; Liu et al. 2013; Manjunath, Rajesh 2012). This implies that, organizations must have the capability to identify the symptoms of stress and must intensify efforts to reduce stress in the workplace. This can be achieved through effective management and organization of work, as well as, healthy corporate culture (Vieet 2011; Weiss 2012). This will increase performance and maximize the possibility of achieving overall strategic objectives (Mendez, Stander 2011).

Many studies have been conducted on the subject of workplace stress (Weiss 2012; Albrecht 2010; Cooper, Payne 2008; Hicks, Caroline 2007; Krohne 2002). However, there are still uncertainties regarding the signs, symptoms and interventions of workplace stress. In Nigeria, research relating to the effects of workplace stress, particularly within the higher education sector is limited. This study focuses on the relationships between the independent variables of role congruence, equity, ergonomics, recognition, distance and the dependent variable of performance. The relationships are depicted in figure 1 below.

To investigate the relationships, the following research questions are posed:
1. To what extent is the impact of role congruence on employee commitment (direct) and job performance (indirect)?
2. In what ways does equity affect employees’ satisfaction (direct) and performance (indirect)?
3. To what extent does ergonomics influence employee satisfaction (direct) and performance (indirect)?
4. To what extent does employee recognition influence employee’s level of engagement (direct) and performance (indirect)?
5. What effects does distance have on productivity (direct) and job performance (indirect)?

1. Literature review

Work stress is the response of employees to job demands and pressures that are not in line with their knowledge, interest, skills and abilities (Hicks, Caroline 2007) and affects their capacity to cope (Fried 2008). Stress arises in wide ranging work situations but becomes worse when employees sense they have little or no control over work processes. Work-related stress can be caused by poor work design (Wagner, Harter 2006), lack of recognition, rigid bureaucratic structure (Hicks, Caroline 2007), office ergonomics (Moran 2010), poor management style (Nelson 2005), unfavourable working conditions (Al-Anzi 2009), pay inequality (Stecher, Rosse 2007), role conflict, amongst other factors.

– Equity, Job Satisfaction and Performance

Talent retention is of primal importance to most organizations. An essential strategy for talent retention is the establishment and sustenance of an equitable work
environment. Inculcating equity in the workplace involves promoting an atmosphere where employees are treated fairly by management and in turn, employees treat management objectively. Studies have indicated the role of workplace equity in reducing stress both at individual and organizational level (Siegel et al. 2007; Adams 1963). Equity is fundamental to the employment relationship because employees should always perceive a sense of fairness in terms of compensation, support, appreciation, recognition, growth and advancement for their effort. Reward should be fair and inclusive to avoid workplace stress. Once the reward condition is met, employees feel a sense of importance and responsibility towards their tasks (Stecher, Rosse 2007). Stress becomes avoidable when organizations are receptive to employees’ ideas, and when avenues are created to mentor employees and engage them in decision making. When employees are actively engaged in the decision making processes of the organization, there is a tendency to exert greater efforts and perform better. Inequity raises dissatisfaction and disenchantment (Hicks, Caroline 2007). When employees sense that they are being treated unfairly, they become less productive and sometimes counter-productive. For instance, in situations where employees feel they are not adequately compensated, high productivity and work quality is likely to reduce. This will adversely affect cohesiveness and team morale (Krohne 2002). For organizations to achieve a more, they must maintain equity so as to; reduce intention to quit, absenteeism level, pressure, anxiety, and improve employees’ satisfaction. It can therefore be hypothesized that:

- **H1**: Equity has positive effect on job satisfaction and performance.

---

- **Distance and Job Performance**

Long distance between employees’ homes and their workplaces may make daily commuting stressful. Distance commuting has socio-political and economic effects on employees and their families, companies and communities. Distance to workplace is inevitable due to the demands of the contemporary work environment. However, when distance becomes unmanageable, it may lead to stress. We therefore hypothesized.

**H2**: Distance has influence on Job Performance

- **Ergonomics, Job Satisfaction and Performance**

Ergonomics is an indispensable and strategic tool for effective employee job satisfaction and performance. It is a systematic and scientific understanding of interactions and interrelatedness of human resource and other key elements with a view to optimize employee well-being for productive performance (Kingsley 2012). Ergonomics considers the interactions of employees with office space arrangement, computers, chairs, tables, lighting, office temperature etc. that enhances employee comfortability, safety, health, satisfaction and performance (Moran 2010). The quest of organizations for increased performance requires the provision of an enabling work environment and office ergonomics to enhance employees’ job satisfaction and performance (Hameed 2009). Hence, to ensure employee satisfaction and workplace performance, organizations must provide suitable environment, adequate office spaces, appropriate work tools and furniture (O’Neill, Wymer 2011; Hameed 2009). It is important to identify areas where poor ergonomics contribute to stress outcomes (Mohd et al. 2011). Poor ergonomics can affect employees’ wellness and performance (Parsons 2000). This makes it necessary to It is not negotiable for organizations to adequately put into proper perspective the inevitability of ergonomics and its strategic fit that will enhance employee's health with the sole aim of improving performance (Al-Anzi 2009; Kingsley 2012). Meanwhile, For instance, working in noisy environments, pairing employees in an office, providing furniture with non-ergonomic features can lead to stress, ailments and musculoskeletal discomfort (Kingsley 2012; Moran 2010; Gutnick 2007). It is hypothesized that:

**H3**: Ergonomics have positive effect on employee satisfaction and performance

- **Role congruence and Job Performance**

Role congruence refers to the match between an individual’s characteristics and the demands of an occupation. This suggests that a lack of consonance between an individual’s traits or interests and the requirements of a job, may have negative effects. Kahn (1981) states that lack of role congruence may result in job-related stress. Hence, job satisfaction, commitment and performance in a chosen career vastly depend on an individual’s personality being in sync with the environment within which the individual works (Adeniji et al. 2014; Dubinsky, Mattson 1986). Churchill et al. (1985) also assert that the environment and personal traits are moderated by the role perceptions of the individual. Stress is an apparent outcome of a mismatch between an individual and job related demands. Extant literature considers job-related stress as a lack of person-environment fit (Kahn 1981). Other indicators of incongruence may be unhappiness, dissatisfaction, low performance, turnover and physical illness (Kahn et al. 1964). We hypothesize that:

**H4**: Role congruence has positive effect on job performance

- **Recognition, Engagement and Job Performance**

Recognition stimulates employee engagement and job performance (Wagner, Harter 2006; Falola et al. 2014). Timely recognition of employees’ efforts strategically reinforces employees’ engagement and performance in the workplace (Kaufman et al. 2013). Manjunath, Rajesh...
(2012) opines that management should employ initiatives to improve employee engagement. Nolan (2012) posits that non-recognition of employee performance often times results in demoralization and stress. Thus, timely recognition is energizes and reinforces employees to exceed expectations (Adeniji, Osibanjo 2012; Nelson 2005). Organizations should ensure timely acknowledgements of employees' productive engagement and equitably reward on the basis of efforts and performance (David 2008; Stajkovic, Fred 2003).

H5: Employee's Recognition has positive influence on employee level of engagement and job performance.

2. Theoretical underpinnings

Several models and theories underpin the subject of workplace stress. Two (2) models (Holland's Person/Environment Model & Person-Environment Fit Model) and one (1) theory (Equity theory) are adopted for this study.

- Holland's Person/Environment Model
A fundamental model is Holland's model of Vocational Choice and Holland's Person/Environment Model (Holland 1966), which states that individuals tend to choose careers which are compatible with their interests and the choice of vocation is an extension or expression of personality. The theory holds that people choose careers which are congruent with their personal makeup. For instance, a research-based vocation should be populated by individuals passionate about research. A sense of idealism characterizes Holland's theory of vocational choice, as many individuals find themselves in careers they are not necessarily compatible with. In many developing countries, the main concern for most people is being employed to fend for themselves and their family members, rather than sourcing for a job that matches their talents and interests. The potential consequence of this is a lack of role congruence which may lead to work-related stress and eventually affect performance outcomes in the workplace.

- Person-Environment Fit Model
Another model that is important to the concept of work stress is the Person-Environment Fit theory (P-E Fit) as credited to Caplan (Caplan, Jones 1975). This theory is similar to Holland's Person/Environment Congruence Model. It assumes that the measure of stress which an individual experiences is commensurate to the degree of mismatch between the individual and the work environment. Hence, the fit or misfit between an individual's personality and the job environment may be an indicator of stress. The P-E Fit encompasses a number of subsets such as person-organization fit (Kristof 1996), person-job fit (Kristof-Brown et al. 2011) and person-person fit (Van-Vianen et al. 2000).

- Equity Theory
Equity theory was propounded by Adam (1963). It states that individual employee who perceives that he or she is being overpaid or underpaid will experience distress and this distress will lead to efforts to bring back equity. The equity theory is a theory of equality in pay. Equity in this regard refers to fairness, impartiality and justice in pay received by an employee. This could translate to the amount of commitment, loyalty and motivation of an individual (Adeniji, Osibanjo 2012). Employees are not concerned with what they are paid, but what others are paid. By implication, if an employee perceives that his/her reward is unfair compared to others, he/she may develop the intention to leave. When pay is perceived to be fair, employees are motivated to perform better.

3. Materials and methods

The survey research method was adopted for this study. This allowed the use of questionnaires in data collection. This method tends to be efficient in collecting large amount of information and flexible in gathering wide range of information such as past behaviors, attitudes and beliefs (Krueger, Cassey 2000). The survey method is argued to be relatively easier to administer in data collection (Presser et al. 2004), hence the adoption of the method for this study. Two hundred (200) copies of questionnaires were administered amongst the faculty members of a government owned university in South-West Nigeria. A total of one hundred and seventy (170) copies of the questionnaire was valid, yielding eighty five percent (85%) of the total questionnaires administered. The questionnaire was divided into two (2) sections; the first section sought for the demographic characteristics of the respondents, whilst the second section contained fifteen (15) items on occupational stress as adapted from Beehr et al. (2001) and Seaward (2005). The items for the dependent variables (role congruent, equity, ergonomic, recognition and distance); moderating variables (employee commitment, satisfaction, engagement, and productivity); and dependent variable (performance) were adapted from literature reviewed.

Each item was based on 5-Likert scales ranging from strongly agree (5) to strongly disagree (1). The procedure of the reliability statistics test based on standardized items produced a result of Cronbach's Alpha of .793. Considering that .70 is the acceptable cut-off value, the result is reliable. Responses were analyzed with the use of Statistical Package for Social Sciences (SPSS) and Structural Equation Modeling (SEM) adopted to test the correlation and regression that exists amongst the variables. Various fit indices were utilized in assessing the overall fit of the study model.
4. Results and discussion

The demographic components of the respondents are depicted in Table 1. The male gender constituted 61.2% of the population; age 30 to 39 years old represented 35.9%. In addition, the profile of the sample shows that one hundred and twelve are married representing 65.9% of the sample size. In terms of relevance, the marital status distribution of the respondent could be said to be adequate for this survey. Expectedly, married persons tend to be prone to various pressure including occupational stress. Furthermore, about forty-five percent of the respondents have obtained second degree (MSc/MBA) representing 44.7% of the respondents; while sixty respondents have been on the job between six (6) to ten (10) years representing 35.3% of the respondents. It is common to have a sizeable percentage of faculty at the lower cadre, the dataset is not in exception. The profile indicates that fifty eight (58) of the respondents are at the lower end of the ladder in job ranking, as the Assistant Lecturer position represents 34.1%. The sample may be considered adequate with reference to the distributions of these characteristics.

Table 2 displays the model fit summary for the survey. Bentler, Wu (2002); Bentler, Bonett (1980); and Kaplan (2000) state that different indicators of goodness-of-fit are usually adopted in various researches. Further, the higher the numbers of the indices of indicators, the acceptable of a good fit such as Normed Fit Index (NFI) => .90; and Comparative Fit Index (CFI) acceptable value => .90. Other informative indices that measure the close association between the model and the data include Root Mean Squared Error of Approximation (RMSEA); Goodness of fit (GFI); etc.

The goodness of fit explains the close association that exists between the observed and expected values. Obtained scores are therefore compared with the cut-off values (Bentler, Wu 2002); Bentler, Bonett (1980) in order to establish the degree of fit. The fit index shows that NFI = .977; CFI = 1.001; GFI = .970; CMIN/df = .237 and minimum score as indicated in the cut-off values was achieved as shown in Table 2.

Figure 2 depicts standardized estimates of the structural model outlining the path coefficient scores of the observed variables in the study. It is evident in the coefficient scores obtained that close association exists amongst the tested variables (distance, recognition, ergonomic, equity, & role congruence), while the regression weights are depicted in Table 3. The parameter estimate as depicted in Figure 2 indicates that distance is the most significant predictor of performance, with aid of the moderating variable (productivity). In other words, distance has indirect effect on performance through productivity (.271, p < 0.001). Also significant is the indirect effects of role congruence; equity; and ergonomic on performance through the moderating variable (employee commitment). Recognition has indirect effect on performance with strong contingent effect of engagement as a moderating variable.

Recognition (H5), equity (H3), distance (H3), and role congruence (H4) were found to be indirectly and statistically significant in the prediction of performance. Therefore, the

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sub-Profile</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>61.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>38.8</td>
</tr>
<tr>
<td>Age</td>
<td>20–29 years</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>30–39 years</td>
<td>35.9</td>
</tr>
<tr>
<td></td>
<td>40–49 years</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>50 years and above</td>
<td>10.6</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>65.9</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>33.5</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>.6</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>BSc/HND</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>MSc/MBA</td>
<td>44.7</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>42.9</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>2.9</td>
</tr>
<tr>
<td>Work experience</td>
<td>0–5 years</td>
<td>41.2</td>
</tr>
<tr>
<td></td>
<td>6–10 years</td>
<td>35.3</td>
</tr>
<tr>
<td></td>
<td>11–15 years</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td>Above 15 years</td>
<td>8.8</td>
</tr>
<tr>
<td>Job Rank</td>
<td>Graduate Assistant (GA)</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>Assistant Lecturer (AL)</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td>Lecturer II (LI)</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td>Lecturer I (LI)</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td>Senior Lecturer (SL)</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>Associate Professor (AP)</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Professor (Prof)</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Note: Total number of respondent = 170.

Table 2. The model fit summary

<table>
<thead>
<tr>
<th>Model-Fit Index</th>
<th>Score</th>
<th>Cut-off Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/ Degree of Freedom (CMIN/DF)</td>
<td>.237</td>
<td>= 2, 3, 5 or 5 upper limit</td>
</tr>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>.977</td>
<td>=&gt; .90</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>1.001</td>
<td>=&gt; .90</td>
</tr>
<tr>
<td>Root Mean Squared Error of Approximation (RMSEA)</td>
<td>.000</td>
<td>.05 or less = good</td>
</tr>
<tr>
<td>Goodness of Fit (GFI)</td>
<td>.970</td>
<td>=&gt; .90</td>
</tr>
</tbody>
</table>
study hypothesized statements are accepted. Ergonomics (H₃) exerted negative and insignificant influence on performance. As obtained in the literature, ergonomics play a significant role in employees’ performance. The results obtained from the survey is contrary to earlier studies in which positive and significant relationships were identified between ergonomics and performance (Kingsley 2012; Moran 2010; Gutnick 2007).

Managerial implications and conclusions

The principal objective of the study is to identify the relationship between workplace stress and organizational performance using a case organization within the Nigerian educational sector. It is evident that workplace stress influences organizational performance. Therefore, the study provides insights to the effect of work stress, taking into consideration variables such as role congruence, equity, ergonomics, recognition and distance on organizational performance, through moderating variables such as employee commitment, satisfaction, engagement, and productivity. The implication for decision makers is that stress management tends to influence performance in organizations and there is need to critically examine the effects of the studied variables on organizations’ performance and provide interventions. Managers should pay more attention to role congruence, equity, recognition and distance, as these variables have positive and significant effects on organizational performance. Although the study found that ergonomics has insignificant effect on performance, its provision would serve as an advantage in order to increase employees’ efficiency. As this study was conducted in one (1) institution within a particular geographical region, it is suggested that future studies may explore the relationships amongst the studied variables in a wider context.

Table 3. Regression weights of the sample

<table>
<thead>
<tr>
<th>Moderating Variables</th>
<th>Independent Variables</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emp_Commit ← Role_Congru</td>
<td>.118</td>
<td>.095</td>
<td>1.235</td>
<td>.217</td>
<td>H₄ – Accept</td>
<td></td>
</tr>
<tr>
<td>Satisfaction ← Recognition</td>
<td>.318</td>
<td>.080</td>
<td>3.955</td>
<td>***</td>
<td>H₅ – Accept</td>
<td></td>
</tr>
<tr>
<td>Productivity ← Distance</td>
<td>.271</td>
<td>.092</td>
<td>2.944</td>
<td>.003</td>
<td>H₂ – Accept</td>
<td></td>
</tr>
<tr>
<td>Satisfaction ← Ergonomic</td>
<td>-.054</td>
<td>.063</td>
<td>-.871</td>
<td>.384</td>
<td>H₃ – Reject</td>
<td></td>
</tr>
<tr>
<td>Satisfaction ← Equity</td>
<td>.301</td>
<td>.078</td>
<td>3.858</td>
<td>***</td>
<td>H₁ – Accept</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2. Standardized estimates of structural model
References


Omotayo A. OSIBANJO (PhD) is a Senior Lecturer in the Department of Business Management, Covenant University, Ota, Ogun State, Nigeria. He obtained a Doctorate degree of Philosophy in Management at Babes Bolyai University, Cluj-Napoca, Romania under the scholarship of the Romanian Government in the year 2008. His research interests amongst others include: human resource management, collective bargaining, manpower planning, labour market analysis, industrial relations. He has thirty publications to his credit.

Odunayo P. SALAU obtained his BSc and MSc degrees in Industrial Relations and Human Resource Management, Olabisi Onabanjo University, Ago-Iwoye, Ogun state. SALAU is a man endowed with passion for teaching and learning. SALAU has obtained several awards in both Academic and Professional institutions. He is an associate and member of professional bodies like CICN, ICBAM, NIM, ISMN, IPMN. He is with the objective of striving for excellence and precision at all times, in all positions and circumstances, obtaining professional distinction and academic proficiency. Presently, he is a Lecturer and a Doctoral Candidate at Covenant University and his research interests in Industrial Relations and Human Resource Management.

Hezekiah O. FALOLA obtained his BSc and MSc degrees in Industrial Relations & Human Resources Management. He worked as Human Resources Executive for about six years in the public sector before he secured a lecturing job in the Department of Business Management, Covenant University, Ota, Ogun State, Nigeria. Presently, he is pursuing his PhD at Covenant University, and his research interest is Industrial Relations & Human Resource Management.

Adebukola E. OYEWUNMI obtained her first degree from the University of Ilorin in 2004 and proceeded to the United Kingdom to study Strategic Human Resource Management at the University of South Wales. She has amassed industry experience working with the Federal Airports Authority of Nigeria, Kiss Group and Lloyds Banking Group in the United Kingdom. Adebukola is passionate about teaching and researching new trends in Industrial Relations & Human Resource Management.