Work Related Stress and Performance of Different Categories of Academic Staff in Federal Polytechnic in South East Nigeria

Chioma Ijeoma Eni (Ph.D)

Department of Business Administration and Management, Federal Polytechnic, Oko, Nigeria

Abstract:

The study investigated work related stress and performance of different categories of academic staff in federal polytechnics in South East Nigeria. Literature based self-structured questionnaire was the principal tool used in eliciting information from three hundred and fifteen (315) respondents drawn from the study population. Descriptive statistics and paired t statistics were used in testing the hypothesis. The value of t statistics is 3.706 with a probability value of 0.001 implying a significant difference on the effect of work related stress among senior and junior lecturers. In other words, the effect of work related stress on senior and junior academics in federal polytechnics in South East Nigeria affect their overall performance differently. Using the mean-standard deviation rule to infer the particular group that is mostly affected. The senior staff category recorded a mean of 13.16 with standard deviation of 3.236, while the junior staff category recorded a mean of 10.95 with a standard deviation of 2.027. Suggesting that the effect of stress on senior academics affect academic performance more than that of junior ones. The researcher suggests that the management of the polytechnics need to develop organizational policies that give individuals more control over their work activities, develop, support systems, shared goals and directions. In this regard, older lecturers should find ways of delegating their jobs to younger assistants in order to reduce the effect of work stress.

Keywords: work related stress, performance, different categories, academic staff, federal polytechnics, South East Nigeria.

Introduction

The social-economic development of any nation is dependent on the success of her educational institutions that play a major role in human capital development and the quality of knowledge generated in educational institutions is critical to national competitiveness. The performance of the staff, both as teachers and researchers determines to a large extent, the quality of the student experience and the contributions such institutions can make to the society.

Responsibility for others can be stressful for managerial and professional workers such as teachers. Larson (2004) and WHO (2016) define work-related stress as the response workers may have when presented with work demands and pressure that are not matched to their knowledge and abilities, which challenge their ability to cope. Stress is depicted as the antagonistic psychological and physical response that happen in a person as a consequence of his or her inability to adapt to the demands being made on him or her (Moorhead and Griffen, 2007). In Nigeria, stress among academic staff of tertiary institutions in one of the factors that has disrupted smooth operation of academic activities in tertiary institutions (Ogugua, 1987).
Job stress affects not only the employees but also the organization in both monetary and non-monetary costs. These costs are used to recover work and health related injuries. Monetary cost is used to recover the health of employees, lower productivity and absenteeism of employees is recovered by non-monetary costs (Syed, Muhammed, Aftab and Shabana, 2013).

Employee performance at the work place is a major concern for organizations. Job performance can be viewed as an activity in which an individual is able to accomplish the task assigned him/her successfully, subject to the normal constraints of reasonable utilization of available resources.

Employees who perceive their jobs as stressful record a decrease in performance. Performance of academic staff may be decreased in such a way that the resultant effect includes complaints from parent and other stakeholders on the status of service delivery in the institutions, frequent strikes, dissatisfied employees, poor performance of the polytechnics in general, and eventually damaging over all image of the educational institutions (Noor and Noor, 2016).

**Statement of the Problem**

The changing nature of academic work appears to have led to a considerable increase in job demands without corresponding increase in job resources. Lecturing is a significant profession from which all other professions take their roots and nourishment. The complexity and challenges of modern tertiary institutions with respect to teaching, research, administration as well as interaction with various interest groups within the educational system are associated with stress.

The tasks that polytechnic lecturers are expected to undertake have changed significantly in recent years, and increasingly their work is perceived as stressful as a result of expanding enrollment in the polytechnic without a proportional increase in teacher’s resource.

Furthermore, several challenges emanating from the institutions and the government also affect the lecturers. The institutional problems comprise institutional policies, heavy workload, poor student behaviour, poor relationships with colleagues and poor working conditions. On the other hand, the governmental reforms include, ever changing higher education reforms and policies, inadequate budget for higher education sector, quality control and accreditation concerns.

An unmitigated teacher occupational stress presents a major problem in education by affecting mental and physical health as well as reducing performance. The cost of stress is seen in increase in the number of absenteeism, decline in work performance, negative attitude of lecturers and premature death. It is against this background that the study was carried out with a view of providing answers, to the highlighted problems.

**Objective of the Study**

To determine whether there is a significant difference between the impact of work related stress among the senior (senior lecturers and above) and junior (below senior lecturers) academic staff.

**Research Questions**

To what extent does the effect of work related stress vary among different categories of academic staff?

**Hypothesis**

There is no significant difference between the effect of work related stress on performance of senior and junior lecturers.

**Literature Review**

Stress is the product of an imbalance between environmental demands and individual capabilities. Job stress is seen as a physiological state of the individual which is influenced by a wide variety of environmental factors known as stressors. Stress is a dynamic and reciprocal relationship between the person and environment (Omolara, 2008). Stressors can range from catastrophic events to irritating incidents. However, stressors do not elicit a stress response in the individual until the person appraises it as exceeding the available resources.
It also allows the possibility that a given level of stress leads to different effects across people, and across time (Dinham, 2004).

Several research papers reveal that, the most stressful types of work are the ones where demands and pressures towards the employees are not matching their abilities and knowledge, where workers do not get an opportunity to make choices or have any control, and where support from others is lacking (Leka, Griffola and Cox, 2004, Fako, 2015; Gail and Wary (2013).

The perception of inability to cope with demands will vary from one individual to another. When the situation is perceived as threatening, and the employee feels unable to cope, there would be stress. When the situation is perceived as merely challenging, but not threatening to physical or mental well being, there would be no stress and no behaviours that reflect unsuccessful coping or adaptation (Omoniyi and Ogunsanmi 2012; Kusi, Mensah, Gyaki 2014).

Many studies of work-related stress have shown that there are a variety of organizational factors that are instrumental in causing stress. Such as factors intrinsic to the job, organizational structure and climate, relationships within the organization, the role of the individual in the organization and career development (Sutherland and Cooper, 1988; Brown and Uehara, 2008; Childs and Stoeber, 2012; Adebiyi, 2011).

Performance as described by Velnampy (2006) is a function of two variables: capacities for work and will to work (otherwise known as motivation). Ying and Ahmad (2009) operationalized employee performance into task and contextual behaviours of employees. Task behaviour is the behaviour associated with maintaining and servicing an organization's technical core while contextual behaviour is one's interpersonal skill, knowledge that support to broader social environment.

Job performance of employees is the most critical subject which plays an important role in accomplishing organizational performance (Wang, 2015). Job performance can be seen as a set of managerial behaviours that express how employees do their jobs (Alawamlas, 2004). Schormerhorn, Hunt and Osborn, (2005) stated that job performance contains a quality and quantity of results driven from individual or group completion. Ismail, Abdraham and Zainababidin (2014) described job performance as the ability of individuals to achieve their respective work aims, then meet their expectations, achieve benchmarks or accomplish their organizational goals.

Theoretical Review

Stress results from the complex interactions between a large system of interrelated variables, there are several psychological theories and models that address occupational stress, (Mark and Smith, 2008). However, this study is anchored job demand resource model.

Job-Demand Resource Model

This model was propounded by Arnold Bakker and Evangelina Demorotti in 2007. Job-Demand Resource model posits that strain are a response to imbalance between demands of one’s job and the resources he or she has to deal with those demands. Job demands are the physical, psychological, social or organizational aspects of a job that require sustained physical and/or psychological effort or skills. Therefore, they are associated with the expenditure of time and energy. (Balducci, Schaufeli and Fraccaroli, 2011). On the other hand, job resources are the physical, psychological, social or organizational aspects of the job that aid in achieving work goals; reduce job demands and the associated physiological and psychological cost, stimulate personal growth, learning and development (Balducci, Schaufeli and Fraccaredi, 2011).

Empirical Review

Anas and Darja (2011) conducted their study on work stress among university teachers: Gender and positive differences. The aim of the study was to investigate exposure to stress at work in university teachers and see if there were differences between men and women as well as between positions. The study was carried out online with a sample of 1,168 teachers employed...
at universities in Croatia. Positional differences in the assessment of exposure to stressor were analysed using one-way analysis of variance, followed by Turkey HSD post-hoc tests, while gender differences were analysed using t-test. A significant difference was found between positions in assessing material and technical conditions, interpersonal relationship, workload, work organization and social recognition and status. Result of Turkey HSD post-hoc test indicated that material and technical conditions, workload, and social recognition and status showed the same pattern of differences between positions. Exposure to these stressors increased with hierarchy, reaching its peak at the position of assistant professor, and then it decreased. Exposure to stress in interpersonal relationship reached its peak at the position of senior assistant, while stress from work organization was similarly high among assistant professors, associate professors, and full professors. Women reported greater exposure to stress at work; gender differences were the most pronounced for work load. Women in all positions assessed workload as a significantly stronger stressor than men. Some workload stressors are directly related to the spilling over of work into the family and social domain. This is one of the reasons why this dimension reports great differences between men and women at certain positions.

In Daniella (2011) stress and job satisfaction among university teachers, 70 university teachers participated in the study, and result of correlation analysis show a negative correlation between stress and job satisfaction. Women also reported a high level of anxiety and depression and a low level of job satisfaction and are found to experience substantially greater job satisfaction than their colleagues without tenure. Women somatise more and their fight for attaining higher expectations than men has its greater physiological and emotional cost. (Daniella 2011). Age and tenure had minimal effects on discussed variables. Although the differences are not statistically significant, a progression of the anxiety scores were dictated depending on age. Individuals from the young segment (24-35 yrs) manifest fewer anxiety symptoms, that is because at this age, individuals mobilize themselves easier, their professional motivation is stronger, now being the time when first work motives appear, when individuals set professional goals to attain. On the other side, ageing brings a visible reduction of biological vigour for individuals from over 50 yrs category, although intellectually, their abilities achieve superior, levels because of accumulated experience. (Daniella 2011).

In Ofoegbu and Nwadiana (2006) study on the level of perceived stress among lecturers in Nigerian universities, involving a sample of 228 (123 males and 105 females), lecturers from eight universities, four research questions and research hypotheses formulated from the study were tested using z-statistics and analysis of variance. The findings show that the level of stress among lecturers differs significantly based on experience and age of the lecturer. The study identifies lecturers in Nigerian universities as one occupational group that function under conditions of high stress. The researchers concluded that once the identified factors remained constant the level of stress among male and female lecturers would remain permanent feature in Nigerian universities.

Omoninyi and Ogunsanmi (2012) conducted a study titled stress among academic staff in South West Nigeria. The aim of the study was to investigate the level of perceived stress among Nigeria university academic staff in the South West Nigeria based on the variable of sex, marital status and years of experience. 364 subjects (223 males and 141 males) were selected from eight universities using stratified random sampling technique. Three hypotheses were raised to guide the study. The data were subjected to appropriate descriptive (means and standard deviation) and t-test statistics. The result indicated that there is no significant difference in the level of stress perceived by male and female lecturers irrespective of their years of experience. The findings also revealed that there is no significant difference in the level of perceived stress by married and divorced lecturers. However, they identified a significant difference between level of stress perceived by married and single lecturers.
Methodology
Survey research design was used and both primary and secondary data were utilized. The research population comprised all academic staff of federal polytechnics of South East Nigeria (Federal Polytechnic, Oko, Federal Polytechnic, Nekede and Akanu Ibiam Federal Polytechnic, Unwana, Afikpo). From a total population of 1465, a sample of 315 was drawn and 272 copies of questionnaire properly completed were used for the analysis.

Operational measures of variables
Two main variables are included in the proposed research model encompassing work related stress and employee performance.

Work Related Stress
Work-related stress was operationalized into seven major dimensions such as work load (WL), Poor working condition (PWC), Time pressure (TP), task of adaptation to new technology (TANT), committee meetings/administrative role (CMAR), career development task (CDT) and attending to students and colleagues (ASC).

Employee Performance
The perceived degree of employee performance was operationalized into three dimensions such as trait based information, behaviour based information, and result based information (Aroosiya and Hussain, 2016). A questionnaire was developed to measure these variables.

Data analysis technique – descriptive statistics were used in the analysis of data, while paired t statistics were used in testing the hypothesis.

Results
Table 1. Responses on the Extent of Work Stress among Academic Staff in Federal Polytechnics in South East Nigeria

<table>
<thead>
<tr>
<th>S/No</th>
<th>Questions</th>
<th>VHE</th>
<th>VHE</th>
<th>NE</th>
<th>NE</th>
<th>LE</th>
<th>LE</th>
<th>VLE</th>
<th>VLE</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>To what extent is work load severe in the institutions</td>
<td>26</td>
<td>57</td>
<td>24</td>
<td>24</td>
<td>105</td>
<td>105</td>
<td>60</td>
<td>60</td>
<td>272</td>
<td>2.00</td>
<td>1.082</td>
</tr>
<tr>
<td>X2</td>
<td>The pressure of an adaptation to new technology is challenging to a ____ extent</td>
<td>6</td>
<td>34</td>
<td>41</td>
<td>41</td>
<td>77</td>
<td>77</td>
<td>114</td>
<td>114</td>
<td>272</td>
<td>1.45</td>
<td>0.967</td>
</tr>
<tr>
<td>X3</td>
<td>Involvement in other activities such as attending of panels, committees and other meetings are demanding to a ____ extent</td>
<td>3</td>
<td>54</td>
<td>64</td>
<td>64</td>
<td>66</td>
<td>66</td>
<td>85</td>
<td>85</td>
<td>272</td>
<td>1.44</td>
<td>1.088</td>
</tr>
<tr>
<td>X4</td>
<td>Marking and collation of results are challenging owing to population of students to a _______ extent</td>
<td>23</td>
<td>8.8</td>
<td>8.8</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>76</td>
<td>76</td>
<td>272</td>
<td>2.16</td>
<td>1.011</td>
</tr>
<tr>
<td>X5</td>
<td>Challenges of career development is stressful to a ____ extent</td>
<td>8</td>
<td>77</td>
<td>59</td>
<td>59</td>
<td>76</td>
<td>76</td>
<td>52</td>
<td>52</td>
<td>272</td>
<td>1.72</td>
<td>1.177</td>
</tr>
</tbody>
</table>

Source: Researcher’s Field Survey.

Table 1 shows the responses on question items X1 – X5 on the extent of work related stress among academic staff in Federal Polytechnics in South East Nigeria. The frequencies,
percentages, mean and standard deviations of the responses are shown in the table.

**Table 2. Responses on Overall Performance of Academic Staff in Federal Polytechnics in South East Nigeria**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Questions</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>The level of lecturers inculcation of ideas and knowledge on the student is commendable</td>
<td>57 (21.0%)</td>
<td>53 (19.5%)</td>
<td>39 (14.3%)</td>
<td>76 (27.9%)</td>
<td>47 (17.3%)</td>
<td>272</td>
<td>2.15</td>
<td>1.327</td>
</tr>
<tr>
<td>7</td>
<td>The quality of students produced in the institution is high</td>
<td>33 (12.1%)</td>
<td>78 (28.7%)</td>
<td>20 (7.4%)</td>
<td>89 (32.7%)</td>
<td>52 (19.1%)</td>
<td>272</td>
<td>2.19</td>
<td>1.107</td>
</tr>
<tr>
<td>8</td>
<td>Lecturers exhibit high cooperation and team work</td>
<td>58 (21.3%)</td>
<td>45 (16.5%)</td>
<td>2 (0.7%)</td>
<td>91 (33.5%)</td>
<td>76 (27.9%)</td>
<td>272</td>
<td>2.30</td>
<td>1.115</td>
</tr>
<tr>
<td>9</td>
<td>Interpersonal and communicative skills of the academic staff in my institution are high</td>
<td>23 (8.5%)</td>
<td>152 (55.9%)</td>
<td>24 (8.8%)</td>
<td>54 (18.9%)</td>
<td>19 (7.0%)</td>
<td>272</td>
<td>2.48</td>
<td>1.045</td>
</tr>
<tr>
<td>10</td>
<td>Performance speed of lecturers in my institution is adequate</td>
<td>42 (15.4%)</td>
<td>67 (24.0%)</td>
<td>8 (2.9%)</td>
<td>69 (25.4%)</td>
<td>86 (31.6%)</td>
<td>272</td>
<td>2.18</td>
<td>1.127</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s Field Survey.

Table 2 shows the responses on items 6-10 on overall performance of academic staff. The table shows the frequencies, percentages, mean, and standard deviation.

Table 3 shows that the senior staff category recorded a mean of 13.16 with standard deviation of 3.236, while the junior staff category recorded a mean of 10.95 with a standard deviation of 2.027.

**Table 3. Responses from Different Categories of Staff**

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff in senior category</td>
<td>13.16</td>
<td>3.236</td>
</tr>
<tr>
<td>Staff in junior category</td>
<td>10.95</td>
<td>2.027</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s Field Survey.

To test this hypothesis, the researcher employed the paired t statistics. The result is presented in table 4 as follows:

**Table 4. Paired Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1 SENIOR – JUNIOR</td>
<td>2.216</td>
<td>3.637</td>
<td>0.598</td>
<td>1.003</td>
<td>3.706</td>
<td>36</td>
<td>.001</td>
</tr>
</tbody>
</table>

**Source:** Researcher’s Computation

The paired t statistic in table 4 shows that the t statistic is 3.706 with a probability value of 0.001 implying that there is a significant difference on the effect of work-related stress among senior and junior lecturers. In other words, the effect of work-related stress on senior and junior academics in polytechnics affect their overall performances differently. Having found
that there is a significant difference, the researcher used the mean-standard deviation rule to infer the particular group that is mostly affected. The table indicating this is presented in 5 as follows.

**Table 5. Paired Samples Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>SENIOR</td>
<td>13.16</td>
<td>3.236</td>
</tr>
<tr>
<td></td>
<td>JUNIOR</td>
<td>10.95</td>
<td>2.027</td>
</tr>
</tbody>
</table>

The table shows a higher mean of 13.16 and also a higher standard deviation of 3.236 for senior academics suggesting that the effect of stress on senior academics affects academic performance more than that of junior ones.

**Discussion**

Finally, the test of hypothesis shows that the effect of work stress on senior (senior lecturers and above) and junior (below the position of senior lecturers) academics in the polytechnics affect their overall performance differently with the senior academics experiencing more effect than junior ones. This result led to the achievement of the objective and also provides answers to the research question. This implies that the risk of stress is more in the senior academics than in the junior ones. One would have expected that senior academics with more experience in teaching will be better adapted to the environment, but our study did not show this. This could be as a result of technological strain and inability to cope with modern methods of lecture delivery (power point, computer based test and so on) and its resultant organizational change. Majority of the senior academic also held administrative position in addition to supervising students’ projects as well as lecturing (more work load).

Another reason could be that the professional motivation is stronger in the junior academics because they set high professional goals to attain. Ageing brings a visible reduction of biological vigour for individuals from over 50 yrs category, although intellectually their abilities achieve superior levels because of accumulated experience (Daniella, 2011).

In a related study, Anas and Darja (2011) study show that teachers in middle positions (assistant professors and associate professors) report the highest exposure to stressors, while full professors, the lowest.

Ofoegbu and Nwadiana (2006) study reveal that the level of stress among lecturers differs significantly based on experience and age of the lecturer, while Omoniyi and Ogunsami (2012) show no significant difference in level of stress perceived by lecturers irrespective of their years of experience.

**Conclusion**

Educational institutions contribute significantly to the development and economic growth of a country by training and providing a required quantity of qualified specialists in various fields of the national economy. The changing nature of academic work appears to have led to a considerable increase in job demands without corresponding increase in job resources. Stress is likely to occur when valued resources are inadequate to meet the demands.

Employees who perceive their jobs as stressful record a decrease in performance. The performance of academic staff may be decreased in such a way that the quality of education offered to the students are affected. The resultant effect includes complaints from parents and other stakeholders on the status of service delivery in the institutions, and damage to the overall image of the educational institutions. Since the performance of academic staff determines the quality of the graduates and the contributions they make to the society, the issue of stress management needs urgent attention. However, the commitment of educational stakeholders towards the welfare of academic staff will reduce work-related stress.
Recommendations

Functional well equipped counseling centres need to be established in all Federal Polytechnics in South East. Competent counsellors may not be able to change the external environment of the lecturers; they may be able to change their internal environments (attitudes to situations). This may be achieved through counselling strategies focused on cognitive restructuring and behaviour modification therapies.

The academic calendar needs to be regularized in order to enable the academic staff to embark on leave. This would enable them return to duty post more refreshed and also impact on the quality of teaching, the level of motivation and efficiency at their respective work places.

The Federal Government needs to provide adequate training to academic staff in order to enable them handle new development, technologies and policy changes. The federal government and the management of the Polytechnics should show adequate concern towards the welfare of Academic staff in order to reduce work-related stress.

The management of the Polytechnics need to develop organizational policies that give individuals more control over their work activities, develop support systems, shared goals and directions. In this regard, older lecturers should find ways of delegating their jobs to younger assistants in order to reduce the effect of stress. They should also find ways of adapting to changing priorities and demands.

References


