

Work-related stress and result based performance of academic staff in Federal Polytechnics of South East Nigeria

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Abstract

The study investigated work related stress and result based performance of academic staff in Federal Polytechnics of South East Nigeria (Federal Polytechnic, Oko, Federal Polytechnic Nekede, Akanu Ibiam Federal Polytechnic Unwana Afikpo). 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 regression analysis were used in data analysis. The result of the regression analysis shows that work related stress has a negative significant impact on the result based performance. The model summary and ANOVA results presented show that the model is highly fitted with no auto correlation with an overall significant regression. The researcher concludes that the commitment of educational stakeholders towards the welfare of academic staff will reduce work-related stress.

Keywords: Work-related stress, result based performance, academic staff, Federal Polytechnics, South East Nigeria.

Introduction

In recent times, stress has become a major issue that has seriously affected academic staff in tertiary institutions all over the world. 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.

Work-related stress is the response people may have when presented with work demands and pressures and abilities which challenge their ability to cope. (Leka, Griffola and Cox 2004; Who, 2016). A job in which there is a high demand on the employee and low control or autonomy is stressful (Rose, 2005).

Mahmood (2013) and Moslem (2015) opine that stress is a function of perceived control, which consists of a person's generalized locus of control (or perceived self efficacy) and actual environment control. When perceived control over objectives external demands (or stressors) is high, the individual is not likely to interpret the situation as threatening and will not perceive (or subjectively experience) stress. When perceived control over external demands is low, however the individual is likely to perceive (or subjectively experience) stress.

It is important to understand, that pressure at work by itself cannot be totally avoided in a modern business world and is not necessarily destructive. On the contrary, when a worker is experiencing an adequate and manageable amount of pressure, he or she might feel alert and inspired to do the job and to learn. Nevertheless, the perception of an acceptable amount of pressure is very individual and once the limit is exceeded the consequence on employees health and performance can be dramatic (WHO, 2016).

Statement of the problem

Teaching is an occupation that demands many roles. Role demands are stressful when meeting one set of expectations make it more difficult to meet other expectations. 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 teachers resource.

Several problems disrupt the smooth operation of academic activities and affect both employee performance and the overall institutional performance. Some of these problems could be attributed to work stress.

Polytechnic lecturers face problems either with the institution or the government, which have negative effects on their effectiveness in teaching and learning process. The institutional problem includes rigid institutional policies, heavy workload and poor working conditions. On the other hand, the governmental problems include, ever changing higher education reforms and policies, inadequate budget for higher education sector, quality control and accreditation concerns. All these constitute potential sources of stress to polytechnic lecturers.

An experience of unmitigated stress can lead to serious consequences on individuals, mental, psychological and physical health. The cost of stress is seen in increase in the number of absenteeism, the decline in work performance, the negative attitude of lecturers and premature death. It is against this background that the study was carried out with a view to providing answers, to the highlighted problems.

Objective of the study

To determine the relationship between work related stress and result based performance of academic in Federal Polytechnics, South East Nigeria?

Research Question

To what extent does work related stress influence result-based performance of academic staff in Federal Polytechnics South East, Nigeria.

Hypothesis

Work related stress does not have a significant impact on the result-based performance of academic staff in Federal Polytechnics South East, Nigeria.

Literature Review

Work- related stress is a combination of high levels of job demands and low levels of control over one's job (Rosenthal, and Alter 2012). Work- related stress refers to physical and emotional responses that occur when the requirements of the job do not match the capabilities and resources provided (Jonker, 2016). Dar, Ahmal, Naseem and Khan (2011) states that job stress occurs as a result of a poor person-environment fit.

National Institute of occupational safety and health (1999), and Arosiya and Wussanes (2016) see work - stress as the harmful physical and emotional responses that occur when job requirements do not match the worker's capabilities, resources and needs.

Coping with stress can be externalized and projected into social and environmental setting in an attempt to deny or avoid their comprehension and the essence of changed conditions (Omolora, 2008). A job in which there is a high demand on the employee and low control or autonomy is stressful (Rose, 2005). Spector, (1998); Mahmood, (2013); Moslem (2015) and Ume (2012) opine that stress is a function of perceived control, which consists of a person's generalized locus of control (or perceived self efficacy) and actual environment control. When perceived control over objectives external demands (or stressors) is high, the individual is not likely to interpret the situation as threatening and will not perceive (or subjectively experience) stress. When perceived control over external demands is low, however, the individual is likely to perceive (or subjectively experience) stress. Each employee is expected to react differently to the same objective stimuli or work demands (Oyoo, 2016). 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).

Meanwhile, Chen (1998) emphasized that job stress occurs when an employee subjectively experiences an incompatibility between himself or herself and his or her work environment, and feels unable to cope, adapt or function effectively as a result of which he or she endures poor mental or physical health or engages in dysfunctional and even counter-productivity behaviours.

All these definition emphasize that stress is a mental or physical stimuli to which the response can be positive or negative thus impacting on personal lives, work performance, productivity and organizational goals. Performance is a complicated interaction between certain performance indicators such as effectiveness, efficiency, quantity, quality of the working life, innovation and profitability (Mehimet and Ahmet, 2014). Performance is mostly examined in two categories- individual and organizational performance.

Employee performance is the individuals performance of a work appropriate to the attributes and skills defined for him/her within acceptable limits. Three factors that affect employee performance at various levels are administrative factors, individual-related factors and other factors.

Administrative factors that affect employee performance are the mission and vision, leadership, participation, communication, stress management and performance evaluation. Among the most important individual-related factors are socio-demographic features (age, gender, marital status and educational background), cultural background, area of expertise and income perception. Other factors that affect performance are individual's practice of professions in specific fields, transfer-of up-to-date technologies to the organization, deficiencies in social security and distance between the home and the workplace.

Result -based performance

Opatha (2002) indicates that result-based information is a key variable of employee performance. Results are outcomes produced by the employee. Result- based performance consider employee accomplishment (Aroosiya and Hussain, 2016). Kottawata (2007) indicates that efficiency achievement, completion of work on schedule, quality of work are variables of result-based performance.

Efficiency

Efficiency is the ability to avoid wasting materials, energy, money and time in doing something or in producing desired result. It is the ability to do things well, successfully and without waste (Teece, Pisano and Shuen 2017; van der Laan, Van Ees, Van Witte loostujin 2018).

In more mathematical or scientific terms, it is the measure of the extent to which input is well used for an intended tasks or function (output). Efficiency is the ratio of performance (units) to the cost incurred to achieve it (Mansour, Mahnaz and Hassan 2016). Efficiency means doing more with less while effectiveness relates to performing the correct activity or operation.

Completion of work on Schedule

Completion of work on schedule is an important measure of performance. For an academic staff, it includes covering of syllabus, timely grading of examinations and timely release of results. If a work activity is accomplished with very good quality and the best time is missed, it may not benefit the institution(Owolabi,2005).

Quality/Quantity of Work

Quality of work relates to output. For an academic staff it includes, students aptitudes, number of successful graduates, number of passes, students employment rates, and lecturers publications. Students output consists of ratio of passes to enrolment at course level with emphasis on graduation and completion rate (Franzian,2003).

This criterion includes completion of tasks in a thorough, accurate and timely manner that achieves expected results. Lecturers should exhibit concern for the goals and needs of the institution and others that depends on their services.

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, Schufell 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).

Methodology

Survey research design was utilized in this study. Data comprised primary and secondary data. The study population comprised all academic staff of Federal Polytechnics of South East Nigeria (Federal Polytechnic, Oko, Federal Polytechnic, Nekede, Akanu Ibiam Federal Polytechnic Unwana, Afikpo) totaling one thousand, four hundred and sixty five (1,465). A sample size of three hundred and fifteen (315) was determined with the aid of Taro-Yamene formula. Two hundred and seventy two (272) copies of completed questionnaire were used in the analysis of data.

The researcher used literature based self developed questionnaire titled Work Related Stress and Result Based Performance Questionnaire (WRSARBPQ). Descriptive statistics and regression analysis were used in the analysis of data.

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). The questionnaire assessed dimensions of work related stress and result based performance.

Result-based performance

Result-based performance was operationalized into efficiency completion of work on schedule, and quality of work.

Data Analysis Technique

Descriptive statistics were used in analysis of data while regression analysis was 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

S/No	Questions	VHE	HE	NE	LE	VLE	N	Mean	SD
X ₁	To what extent is work load severe in the institutions	26 (9.6%)	57 (21.0%)	24 (8.8%)	105 (38.6%)	60 (22.1%)	272	2.00	1.082
X ₂	The pressure of an adaptation to new technology is challenging to a _____	6 (2.2%)	34 (12.5)	41 (15.1)	77 (28.3)	114 (41.9)	272	1.45	0.967
X ₃	Involvement in other activities such as attending of panels, committees and other meetings are demanding to a _____ extent	3 (1.1%)	54 (19.9%)	64 (23.5%)	66 (24.3%)	85 (31.3%)	272	1.44	1.088
X ₄	Marking and collation of results are challenging owing to population of students to a _____ extent	23 (8.5%)	8.8 (32.4%)	7 (2.6%)	78 (28.7)	76 (27.9%)	272	2.16	1.011

X ₅	Challenges of career development is stressful to a _____ extent	8 (2.9%)	77 (28.3%)	59 (21.7%)	76 (27.9%)	52 (19.1%)	272	1.72	1.177
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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 the extent of Result based performance

S/No	Questions	VH	H	N	L	VL	N	Mean	SD
X ₆	Teaching well (output quality)	58 (21.3%)	53 (19.5%)	39 (14.3%)	75 (27.6%)	47 (17.5)	272	2.16	1.332
X ₇	Release of results on time	33 (12.1%)	78 (28.7)	21 (7.7%)	89 (32.7%)	51 (18.8%)	272	2.19	1.113
X ₈	Number of students passing the exam (output quantity)	57 (21.0%)	44 (16.2%)	2 (0.7%)	91 (33.5%)	78 (28.7%)	272	2.28	1.115
X ₉	Lecturers adherence to polytechnic policy and value	23 (8.5%)	153 (56.3%)	24 (8.8%)	53 (19.5%)	19 (7.0%)	272	2.49	1.045
X ₁₀	General commitment to duty	43 (15.8%)	66 (24.3%)	7 (2.6%)	70 (25.7%)	86 (31.6%)	272	2.19	1.123

Source: Researcher's Field Survey.

Table 2 shows the responses on question items 6 -10 on the extent of result based performance. The frequencies, percentages, mean and standard deviations are captured in the table.

Ho: Work related stress does not have significant impact on result based performance of academic staff in Federal Polytechnics of South East Nigeria.

The result of the regression analysis is presented in table 3 as follows.

Table 3 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.622	.518		34.042	.000
	WRSAS	-.714	.056	-.616	-12.856	.000

a. Dependent Variable: RBPAS

Source: Researcher's Computation

This result shows that work- related stress has a negative significant impact on the result- based performance. The model summary and ANOVA results presented show that the model is highly fitted with no autocorrelation and the overall regression is significant. Thus we reject H_o and accept H_A that work-related stress has a significant impact on result- based performance of academic staff of Federal Polytechnics in South East Nigeria.

Table 4 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.616 ^a	.380	.377	2.700	.380	165.266	1	270	.000	1.781

a. Predictors: (Constant), WRSAS

b. Dependent Variable: RBPAS

The result from the regression analysis shows that work related stress has a negative and significant impact on the result-based performance. Previous researches on work stress did not focus on such dimensions of performance like result-based performance. Kottawatta (2007) identified efficiency achievements, completion of work on schedule and quality of work as aspects of result-based performance. Efficiency entails the ability to avoid wasting materials, energy and money as well as time in accomplishing result. For an academic staff, the quality of his work relates to quality of graduates, number of passes, lecturers' publications as well as completion of tasks in a thorough, accurate and timely manner. Thus work-related stress affect all these variables. This finding is supported by the study of Syed, Jabran, Ahsan, Sidra, Wasiq and Syed that established a negative relation between stress and employee efficiency.

Hamza, Mohammed and Mohammad (2015) show that high level of stress may have an effect on working efficiency and general physical health. The high stress level decreased efficiency day activity and made the trainees absent from the work place. Unless the academic institutions put appropriate measures that take care of well being of the academic staff, their health may compromise the quality of education they are supposed to impact on students.

Conclusion

In recent times, stress has become a major issue that has seriously affected academic staff in tertiary institutions all over the world. The performance of academic staff determines to a large extent, the quality of graduates and the contributions they make to the society. However, mismanaged organizational stress can produce individual stresses and strains that are detrimental both to the individual and to the organization.

Managing stress at work is important due to the various consequences of stress. Even though many of them are concerned with the individuals, they all might result in negative counter-productive consequences for the organization. Therefore organizations should be concerned about and engaged in the actions and measures to not only prevent excessive occupational stress among the employees, but also to be able to properly manage it in order to minimize the negative effects. The resultant effect would be improvement in the quality of education and the provision of talented and competent work force in the country.

Recommendations

1. The management of the Polytechnics need to reduce the excess work load by engaging within available resources more lecturers either on full or part time.
2. Stable and conducive working conditions need to be provided by management to motivate lecturers to put in their best and also to reduce stress. This will go a long way to reducing work related stress and improving result-based performance.
3. 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.
4. 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.
5. 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.

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