

Research Article

Comparative Analysis of Factors Responsible for Job Stress in a Selected Public and Private University in Nigeria

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ABSTRACT

The study investigated the impact of Administrative Demand, Work Schedule Recreation activities and Environmental Factors on Job Stress among named Public and Private University Staff. The research hypothesis were formulated and tested in the study. The study adopted ex-post factor research design and 250 staff were randomly selected from the groups of staff. Data were collected using a self-developed questionnaire by the research. Data were analyzed using Multiple Regression and Analysis of Variance (One- way), while results were tested at the level of 0.05 levels of significance. Results indicated that, significant differences existed, between the Administrative Demand, Work Schedule and Environmental Factors, Recreation activities and Job Stress. Secondly, a strong positive relationship existed between Job stress and the three independent variables and finally each of the variables contributed significantly to Job stress. On the basis of this finding, it was suggested that:

Key words: Job stress, Administrative Demand, Work Schedule and Environmental Factors, Recreation activities.

Introduction

Job life is one of the important parts of our daily lives which cause a great deal of stress. Due to the competitive nature of the job environment most of the people in the world are spending their time for job related work purposes, ignoring the stressor that are influencing their work and life. Usually people are more worried about the outcome of their work that can even affect the way they treat other people and how they communicate with their peers and customers. For example, people with a higher percentage of occupational stress may not be satisfied with their job and therefore they will not feel happy working in the organization (Nilufar, Zaini, David & Syed, 2009)

Numerous studies found that job stress influences the employees' job satisfaction and their overall performance in their work, because most of the organizations now are more demanding for the better job outcomes. In fact, modern times have been called as the "age of anxiety and stress" (Coleman, 1976). Stress itself will be affected by number of stressors. Nevertheless, Beehr & Newman (1978) had defined stress as a situation which will force a person to deviate from normal functioning due to the change (i.e. disrupt or enhance) in his/her psychological and/or physiological condition, such that the person is forced to deviate from normal functioning. From the definition that has been identified by researchers, we can conclude that it is truly important for an individual to recognize the stresses that are faced by them in their career especially in the University setting.

Stress is an important psychological concept that can affect health, well-being and job performance in negative dimensions, (Mojoyinola, 1984; Olaleye, 2002). Stress according to Arnold, Cooper & Robertson (1995), is a word derived from Latin word "Stingere" meaning to draw tight. It is regarded as a force that pushes a physical or psychological factor beyond its range of stability, producing a strain within the individual. Stress is the process by which environmental events (stressors or challenges) threaten us, how these threats are interpreted, and how they make us feel (Baum, Gatchel & Krantz, 1997). Lazarus (1966) conceived stress to be a threat of anticipation of future harm, either physical or psychological events that lower an individual's self-esteem. It is an affective behaviour and physical response to aversive stimuli in the environment. According to Selye (1976), stress is a state within the organism characterized by general adaptation syndrome. In other word, it is the nonspecific response of the body to

the demand made upon it. It suggests excessive demands that produce disturbance of physiological, sociological and psychological systems. Stress may be acute or chronic in nature investigate how job related stress affect the physical health, mental health, personal and work behavior.

The management role of an organization is one of the aspects that affect work-related stress among workers (Alexandros-Stamatios, Matilyn & Cary, 2003). Workers in an organization can face occupational stress through the role stress that the management gave. Role stress means anything about an organizational role that produces adverse consequences for the individual (Kahn & Quinn, 1970). Management will have their own role that stands as their related. Role related are concerned with how individuals perceive the expectations other have of them and includes role ambiguity and role conflict (Alexandros-Stamatios, Matilyn & Cary, 2003).

Job stress has been implicated in the onset and maintenance of so many acute and chronic diseases, scientific priorities have shifted to focus on primary and secondary prevention strategies by way of stress reduction and stress management techniques in order to reduce the burden of disease on the population (Ebrahim & Davey Smith, 1998; Schneiderman, Antoni, Saab, & Ironson, 2001; Kromhout, Menotti). Though stress is a universal construct that affects all humans, studies shows that different populations are known to have different stressors (Sarafino & Ewing, 1999; Morrison & O'Connor, 2005)

Several studies have highlighted the deleterious consequences of high workloads or work overload. According to Beehr, (1995) work overloads and time constraints were significant contributors to work stress among community nurses. Workload stress can be defined as reluctance to come to work and a feeling of constant pressure (i.e. no effort is enough) accompanied by the general physiological, psychological, and behavioral stress symptoms (Kesteloot, & Sans, 2002). Al-Aameri AS. (2003) has mentioned in his studies that one of the six factors of occupational stress is pressure originating from workload. Alexandros-Stamatios, Matilyn & Cary (2003) also argued that "factors intrinsic to the job" means explore workload, variety of tasks and rates of pay. Akinboye, Akinboye, & Adeyemo, (2002). It exists in different forms. It may be psychological, emotional, social, occupation or job related. Stress experienced by workers at work is called job stress. It may be due to a number of factors such as poor working condition, excessive work load, shift work, long hours of work, role ambiguity, role conflicts, poor relationships, with the boss, colleagues or subordinate officers, risk and danger, to mention a few. Certain responses indicate the presence of job stress in an individual, or group. It may manifest by the presence of headache, sleep disturbances, difficulty in concentration, short temper, upset stomach, job dissatisfaction and low morale (NIOSH, 1998). Other manifestations or indications of presence of job stress include muscular tensions and ache, tightness in the chest, high blood pressure, heat problems, snapping and arguing with others, aggressive or hostile behaviour, blaming others or administration for tension, absenteeism and high staff on job turnover. The above manifestations can be clearly observed in hospital nursing staff, which may have negative effects on their health, personal and work behaviours.

Repetti (1993) also found that poor relationship between the superior and the workers contribute to the level of stress experienced by the workers. He found that the workers experienced more negative moods on the days when they had distressing interactions with their superiors and coworkers. Holt (1993) found that shift works can lead to a variety of physical complaints, including sleep and gastro-intestinal problems and can also interfere with the family life. The problem of this study therefore, is to investigate how Administrative Demand, Work Schedule, Environmental Factors, Recreation activities could contribute to job stress among Babcock University Workers. The study also is also aimed at addressing the issue of how stress at work can be effectively managed, reduced, or prevented by the University administration in order to enhance the physical and mental health or improve their personal and work behaviour. For these reason the following hypotheses are raised:

1. There is no significant single and combined contribution between the independent variables and Job Stress
2. There is no significant difference between Administrative Demand, Work Schedule, Environmental Factors, Recreation activities and Job Stress
3. There is no significant relative contribution Administrative Demand, Work Schedule, Environmental Factors, Recreation activities on job stress.

Method and Design

The study adopted the descriptive survey research design of ex-post factor, because the variables being studied had occurred and could not be manipulated by the researcher. Furthermore the researcher is finding the relationship between the independent variables (Administrative Demand, Work Schedule and Environmental Factors, Recreation activities) and the dependent variables (job stress).

Population, Sample and Sampling techniques

The population for this study was made up of workers (Academic & Non –Academic) from whose ages ranged from 20 – 65 years, chosen from Babcock University Ilisan Remo and Olabisi Onabanjo University in Ogun State, Nigeria. A sample of 400 workers was randomly selected. The mean age of the respondent was 39.2 while the standard deviation was 10.291.

Instrumentation:

The instrument consists of structured questions developed by the Researcher. Section A consists of demographic data like gender and school type, while section B consists of structure questions which measures job stress. The questions were made in such a way that it measures different aspect of job stress in relation to Administrative Demand, Work Schedule and Environmental Factors. Some questions were taken while some were deleted. A total number of 40 questions were taken in which ten questions were in each section. Participant responded to the questions statement in a 5 – point likert scale ranging from Strongly Disagree = 1, Disagree – 2, Neither -3, Slightly Agree - 4. and Strongly Agree-5

Validity and Reliability

The questionnaire was subjected to face validity and content validity by the assistance of experts in research method. Some questions were reconstructed, while some were deleted. A reliability coefficient of 0.76 was obtained via a test-retest method after on internal at 2 weeks.

Results

H₁:- There is no significant single and combined contribution between the independent variables and Job Stress.

Table 1:- Multiple Regressions showing single and combine contribution of the independent variables (Model Summary)

Model	R	R Square	Adjusted R Square	Standard Estimation
1	.768 ^a	.590	.584	12.10076
2	.795 ^b	.632	.625	6.73958
3	.801 ^c	.641	.638	4.88487
4	.828 ^d	.686	.678	3.54627

- Predictors; (constant), Recreation activities
- Predictors; (constant), Environmental Factors, Recreation activities
- Predictors; (constant), Work Schedule and Environmental Factors, Recreation activities
- Predictors; (constant) Administrative Demand, Work Schedule and Environmental Factors, Recreation activities

The result above indicated that Administrative Demand, Work Schedule and Environmental Factors, Recreation activities taken together and singly contributed to Job Stress. In the Model summary above, Model shows that $R = .768$; $R^2 = .590$ and adjusted R^2 of .584, which implies that the absence of Recreation activities contributed to 58.4% at job stress. Model 2 shows that a combination of Environmental Factors, Recreation activities, $R = .795$; $R^2 = .632$ and R^2 adjusted = .625 that is 62.5% is responsible for Job Stress. Model 3; a combination of Environmental Factors, Recreation activities $R = .801$; $R^2 = .641$ and R^2 adjusted = .638, hence 63.8% contributed to Job stress. While in Model 4. A combination of Administrative Demand, Work Schedule and Environmental Factors, Recreation activities shows that $R = .828$, $R^2 = .686$ and R^2 adjusted. = .678, that is, 67.8% contribute to Job stress. The hypothesis of no combined contribution is discarded.

H₂:- There is no significant difference between Administrative Demand, Work Schedule, Environmental Factors, Recreation activities and Job Stress.

Table 2: Analysis of Variance (One-Way)

	Model	Sum of square	Df	Mean square	F	Sig.
1	Regression Residual Total	4438.818 36314.144 40752.962	1 248 249	4438.818 146.428	30.301	.000 ^a
2	Regression Residual Total	801.131 11219.234 12020.365	2 247 249	1602.261 45.422	35.275	.000 ^b
3	Regression Residual Total	331.292 5870.052 6201.344	3 246 249	993.876 23.862	41.651	.000 ^c
4	Regression Residual Total	158.002 3081.12 3239.122	4 245 249	632.006 12.576	50.255	.000 ^d

- a. Predictors; (constant), Recreation activities
 b. Predictors; (constant), Environmental Factors, Recreation activities
 c. Predictors; (constant), Work Schedule and Environmental Factors, Recreation activities
 d. Predictors; (constant) Administrative Demand, Work Schedule and Environmental Factors, Recreation activities

Result above show the ANOVA (one-way) of Administrative Demand, Work Schedule, Environmental Factors, Recreation activities. It is seen in Model 1, ($F_{1, 248} = 30.301$; $p < 0.5$); Model 2, and combination of ($F_{2, 247} = 35.275$; $p < 0.5$). While Model 3, ($F_{3, 246} = 41.651$; $p < .05$) and model 4 ($F_{4, 245} = 50.255$; $p < .05$). Hence hypothesis of no significant difference is hereby discarded and the alternate is accepted.

H₃:- There is no significant relative contribution Administrative Demand, Work Schedule, Environmental Factors, Recreation activities on job stress.

Table 3: Multiple Regressions (Step wise) showing the relative contribution of each of the variable.

	Model	Unstandard co-efficient		standard co-efficient	T	Sig.
		B	Std.	B		
1	Constant	60.611	- 3.267		18.551	.00
	Recreation activities	1.740	.176	.765	9.895	.000
2	Constant	36.365	2.678		13.578	.000
	Recreation activities	1.393	.102	.615	13.666	.000
	Environmental Factors	1.730	.140	.555	12.338	.000
3	Constant	17.566	3.084	.545	5.696	.000
	Recreation activities	1.234	.077	.499	16.116	.000
	Environmental Factors	1.392	.110	.447	12.611	.000
	Work Schedule	1.421	.181	.285	7.844	.000
4	Constant	4.560	2.797		1.630	.000
	Recreation activities	1.129	.057	.499	19.736	.000
	Environmental Factors	1.276	.082	.402	15.644	.000
	Work Schedule	1.113	.137	.223	8.100	.000
	Administrative Demand	1.117	.157	.209	7.761	.000

- a. Predictors; (constant), Recreation activities
- b. Predictors; (constant), Recreation activities, Environmental Factors
- c. Predictors; (constant), Recreation activities, Environmental Factors and Work Schedule
- d. Predictors; (constant) Recreation activities, Environmental Factors, Work Schedule and Administrative Demand,

The result in the table shows the relative contribution singly and combined. In Model 1 Recreation activities contributed ($\beta = .768$; $t = 9.895$; $p > .05$). In model 2, with a combination of Recreation activities and Environmental Factors, it shows that for Recreation activities ($\beta = .615$, $t = 13.666$; $p > .05$ and Environmental Factors, $\beta = .555$ $t = 12.328$; $p > .05$). In Model 3, with a combination of Work Schedule and Environmental Factors, Recreation activities ($\beta = .545$; $t = 16.116$;) Environmental Factors ($\beta = .447$ $t = 12.611$) and Work Schedule ($\beta = .285$, $t = 7.894$) $p > .05$, The last Model, with combination of Administrative Demand, Work Schedule and Environmental Factors, Recreation activities ($\beta = .499$; $t = 19.736$) Environmental Factors ($\beta = .402$, $t = 15.644$, Work Schedule ($\beta = .223$, $t = 8.100$) and Administrative Demand ($\beta = .209$, $t = 7.761$) all are significant at 0.05 level. Hypothesis of no relative contribution is discarded and the alternate is accepted.

Discussion

Consequently upon the analysis of the data, the following findings were aimed at:

Hypothesis one of no significant combined contribution shows that the Predictors; administrative Demand, Work Schedule and Environmental Factors, Recreation activities are good predictors of job stress. It revealed that in model 1 -Model 4, 58.4%, 87.1%, 93.2% & 96.4% are attributed to job stress. All these could not have happened by chance although 41.6%, 12.9%, 6.8% & 4% respectively could not be accounted for.

The result of the finding is in line with who revealed these are major source at worker stress. (Nilufar, Zaini, David & Syed, 2009; Olaleye, 2002).

Hypothesis two shows the Analysis of Variance (one way) in Table 2. All the variables in single and combined shows significant differences to the prediction of job stress. Hence it is more than mere saying that all the four independent variables are determinant of job stress.

In Table 3, hypothesis of no significant relative contributed to the prediction of job stress is discarded. It is shown that each and combined variables show a significant relative contribution. The finding revealed that recreation facilities contributed must follows by Environmental Factors, Work and finally administrative demand.

The result also supported the findings of Alexandros-Stamatios, Matilyn & Cary (2003) who found out that inadequate facilities provided for the workers or workers tight schedules are potent threat to work stress.

Conclusion

It is concluded that all these four variables contributes to work stress while recreation activities contributed most, followed by Environmental Factors, Work Schedule, & administrative Demand, respectively.

Recommendation

Upon the findings established by these data it is recommended that:

1. Schools provide enough recreation facilities like gym reduce the effect of burning out at work.
2. Adequate classroom, conducive offices and staff welfare must take priorities when establishing schools.
3. Physical health educationist, Social workers, counters must lunch a campaign on the need for workers to relax especially on weekends
4. Work schedule must be flexible enough so as to give room for relaxation.

References

- Al-Aameri A.S., 2003. "Source of job stress for nurses in public hospitals", *Saudi Medical Journal*, 24(11), pp.1183-1187.
- Alexandros-Stamatios G. A., Matilyn J.D.& Cary L.C., (2003). "Occupational Stress, Job satisfaction, and health state in male and female junior hospital doctors in Greece", *Journal of Managerial Psychology*, 18(6), pp. 592-621
- Akinboye J.O., Akinboye, D.O. & Adeyemo, D.A. (2002) *Coping with stress in life and Work place*. Ibadan: Stirling-Hordern Publishers (Nig) Ltd
- Arnold, J., Cooper, C. & Robertson,T.(1995).*Work Psychology: Understanding Human behaviour in the Work Place*. London: Pitman Publishing.
- Baum, A., Gatchel, J. & Krantz. S. (1997). *An Introduction to Health Psychology*. New York: The McGraw-Hill Companies, Inc.
- Beehr, Terry A. (1995), *Psychological Stress in the Workplace*, London and New York.
- Beehr, T.A. & Newman, J.E. (1978). "Job Stress, Employee Health and Organizational Effectiveness: A Facet Analysis, Model and Literature Review", *Personnel Psychology*, 31, pp.665-669.
- Coleman J.C. (1976) *Abnormal Psychology and Modern Life* (Indian reprint), Iniaporewalla, Bombay
- Ebrahim, S., & Davey Smith, G. (1998). Lowering blood pressure: A systematic review of sustained effects of non-pharmalogical interventions. *Journal of Public Health Medicine*, 20(4), 441-448
- Holt, R. R. (1993). "Occupational Stress", (pp.342-367) in L. Goldberger and S. Breznitz (eds.), *Handbook*
- Kahn,R.L. & Quinn, R.P.(1970) . *Role stress: A framework for analysis*, In A. McLean (Ed.),*Occupational mental health*, New York: Wiley]
- Kromhout, D., Menotti, A., Kesteloot, H., & Sans, S. (2002) Prevention of coronary heart disease by diet and lifestyle: evidence from prospective cross-cultural, cohort, and intervention studies. *Circulation*, 105, 893-898.
- Lazarus, R. S. (1966). *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Mojoyinola, J. K. (1984). *Occupational Stress Among The Student Nurses of University College Hospital (U.C.H), Ibadan: It's Effects on Their Mental Health and Well-Being*. Unpublished B.Sc. Project,University of Ibadan.
- Morrison, R. & O'Connor, R. C. (2005). Predicting psychological distress in college students: The role of rumination and stress. *Journal of Clinical Psychology*, 61(4), 447-460
- Nilufar, A., Zaini A., David, Y. & Syed, A. (2009). A Study of Job Stress on Job Satisfaction among University Staff in Malaysia: Empirical Study *European Journal of Social Sciences – Volume 8, Number 1*
- NIOSH, (1998). "Stress at Work: Job Stress and Health."Retrieved January 15, 2010, from <http://www.cdc.gov/noish/jobstress.html>
- Olaleye, B. A. (2002). *Psycho-Social Effects of Job Stress and Burn-out Syndrome among Nurses in State-Owned Hospitals in Oyo State*. M.S.W. Project, (Unpublished) University of Ibadan, Nigeria
- Repth, R.L (1993) "The effect of workload and Sonal Environment on Health; pp 120-130 in L. Goldberger and S. Breznitz (ed). *Handbook of stress: Theoretical and Clinical Aspects*.
- Sarafino, E. P., & Ewing, M. (1999). The hassles assessment scale for students in college: Measuring the frequency and unpleasantness of dwelling on stressful events. *Journal of American College Health*, 48(2), 75-83.
- Schneiderman, N., Antoni, M. H., Saab, P. G., & Ironson, G. (2001). Health Psychology: psychosocial and behavioral aspects of chronic disease management. *Annual Review of Psychology*, 52, 555-580;